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Active Labor Market Policies in the OECD and in Selected Transition Economies

Hartmut Lehmann

Applying mechanically active OECD labor policies in Hungary, Poland, and Russia makes no sense because the economies are so different. Which labor policies are realistic there? Training able workers in scarce, needed skills; easing credit for (and thereby encouraging) the self-employed; giving public jobs to problem workers and the long-term unemployed; and improving consultation services for the unemployed.

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Summary findings

Transition economies have introduced a range of OECD active labor market policies to combat unemployment — albeit often on paper only, as with rising unemployment passive policies have crowded out active ones. But even in the Czech Republic, active labor market policies have contributed only marginally to reducing unemployment.

One task for policymakers in Central and Eastern Europe must be to convey the message that, even under the best circumstances, active labor policies can play only a marginal role in reducing unemployment.

OECD labor policies cannot be applied mechanically in Central and Eastern Europe because the situation there is different. Severe and persistent shortages in capital and managerial ability are sure to keep labor demand weak in the medium term, while labor supply will be abundant. As enterprises are restructured and liquidated, the newly unemployed workers cannot be absorbed by the weak private sector and must compete for scarce jobs. Women and older, less educated men have particular trouble finding work.

Which active labor policies does Lehmann suggest might be effective?

Limited funds for active labor policies might best be spent retraining the most able unemployed workers to develop skills needed in the private sector.

Public employment programs might be targeted especially to problem groups of workers and to the long-term unemployed — more for reasons of equity than of efficiency. The point is to have a clear idea whether both aims of efficiency and equity *can* be pursued and, if efficiency gains are unrealistic, whether equity considerations are politically indispensable.

Because nontradable services are underdeveloped, Central and Eastern European countries might eliminate credit rationing that discourages self-employment (the self-employed have trouble getting financing).

Improving consulting services for the unemployed in Hungary, Poland, and Russia makes more sense than applying a broad menu of OECD programs.

The labor market in the Russian Federation appears to be more dynamic than in Hungary and Poland, but this is probably because of massive labor hoarding in Russian enterprises. Once they start shedding labor in earnest, their employment figures will look more like those in the other Central and Eastern European countries.

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Active Labour Market Policies in the OECD and in Selected Transition Economies

by
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I Introduction

Since the beginning of their transition to a market economy the economies of Central and Eastern Europe (CEE) experienced a sharp rise in open unemployment, reaching comparable levels to the worse performing economies of the OECD.[2] Having had continuous difficulties with the fight against inflation, governments in CEE had thus far few possibilities to reflate their economies and have tried from early on to combat the incidence of unemployment with active labour market policies (ALMPs). The rise of unemployment has, however, increasingly involved the "crowding out " of resources for ALMPs in favour of unemployment benefit payments.

Nevertheless, it seems worthwhile to discuss ALMPs in transition economies, as they can play a role at the margin in the fight against unemployment. Such policies are here understood in the narrow sense of policies targeted at the unemployed and those threatened by redundancies. Clearly, sound macroeconomic policies, policies inducing large foreign direct investment and the existence of a political and social consensus about how to distribute the costs of transition are crucial for rapid growth and thus more employment. The issue of modernisation of state-owned enterprises (SOE's) via foreign direct investment and its effect on employment will be briefly touched upon, citing the example of eastern Germany. The analysis is restricted also in so far as partial equilibrium effects of ALMPs will be the main interest when evaluating such policies. Given the very limited size of active policies in virtually all transition countries general equilibrium effects should for the most part be negligible.

There have been exhaustive surveys of ALMPs in OECD countries in the literature (most recently, OECD (1993), ch.2 and Björklund et al. (1991)). Section II contains a brief discussion of the merits of transplanting ALMPs developed to fight unemployment in mature market economies to CEE.

[2] The main exception to this statement is the Czech Republic where open unemployment has stayed very low throughout the transition.

Section III analyses the mix of passive and active labour market policies and the specific ALMPs instruments in economies of transition. The Czech Republic, Hungary and Poland will be discussed as concrete examples.

The evaluation of ALMPs in these countries will be attempted in section IV. As data availability and quality varies, this will be done using different approaches. For Hungary evaluation studies using micro data have already been undertaken and the main results of these studies will be presented and discussed. For Poland augmented matching functions will be estimated using administrative data with the aim to establish whether there is a positive correlation between the level of participants in a measure and the flow of hirings. Additionally, "problem groups" among the unemployed will be identified using stock variables and estimated transition probabilities calculated from the Polish LFS data. Furthermore, the raw data from the Supplement on Labour Market Policies attached to the August 1994 Polish LFS (Lehmann and Wadsworth, 1995) will be used for a preliminary evaluation of Polish ALMPs. The situation with Czech micro data availability looks somewhat less promising. To my knowledge there are no serious attempts thus far to evaluate the effectiveness of Czech ALMPs, using such data. Burda and Lubyova (1995) have estimated augmented matching functions for the Czech Republic using regional administrative data. They show convincingly that ALMPs could have only marginally affected the unemployment rate in that country. Especially interesting is, therefore, a general assessment of the situation in the Czech labour market. This assessment tries to identify all the determinants of the low unemployment rate. The effects of Czech ALMPs will then be seen in this broader context.

The possible lessons that the Russian Federation might learn from the experience of the three above mentioned Central European countries will be discussed in Section V while section VI concludes.

II The Applicability of OECD Active Labour Market Policies in Transition Economies

In OECD countries the following programme categories are considered part of ALMPs:

a. public employment services ("job brokerage") and administration;
b. labour market training;
c. youth measures;

d. subsidised employment;
e. measures for the disabled.

In most transition economies all these categories have been introduced, with the emphasis varying from country to country. The merits of measures **a** and **e** are straightforward in both OECD and transition countries. What is interesting from a theoretical point of view is whether active measures from categories **b**,**c** and **d** can have the same functions in transition economies as in mature capitalist economies and whether they can, consequently, be evaluated in a similar fashion.

Abstracting from counter-cyclical employment measures, ALMPs in OECD countries like **b**,**c** and **d** seek to integrate marginal social groups or to reintegrate marginalized groups into the labour market. Whilst the large majority of the labour force are continuously employed, certain groups with relatively loose labour market attachment and/or very low human capital experience great difficulties in gaining permanent employment (e.g. some school leavers, older unskilled workers, women, minorities). By participating in a training or subsidised employment scheme, the human capital of "marginal" persons can be increased and their labour market attachment strengthened thus boosting the probability of employment or re-employment. The economic rationale behind the application of such measures is an attempt to increase the effective labour supply. Such an increase can also be caused by the re-integration of persons who have lost their job because of structural shocks or because of a deep recession. With unusually large inflows into unemployment many of those made redundant may experience a very long spell of unemployment and consequently be discriminated against by prospective employers. Integration or re-integration of "problem persons" into the labour force increases effective labour supply and *ceteris paribus* lowers the equilibrium wage and thus increases overall employment. ALMPs which successfully increase the effective labour supply can, during the expansionary phase of the business cycle, contribute to the dampening of inflationary pressures (Calmfors, 1994) and/or help in the solution of partial hysteresis of unemployment due to long-term unemployment (Layard, et al., 1991).

In OECD countries, a second feature of measures like **b**,**c** and **d** is a means of reducing mismatch by skill or region (Padoa-Schioppa, 1991).

When evaluating measures like **b**,**c** and **d** in OECD countries the following questions are typically asked:

- did the schemes target the groups identified as those having problems leaving unemployment?
- did participation in a scheme enhance individuals' productivity expressing itself in higher wages?
- did the measure increase the average re-employment probability of participants?
- have distortive effects, e.g. substitution-, dead weight-, displacement-of-output- and fiscal substitution effects, been minimised?

These questions are also relevant in transition countries. However, some stylised facts of labour markets in transition need to be recalled when discussing the targeting issue. Labour markets in transition economies are characterised, apart from the Czech Republic and possibly Russia, by a low demand for labour, a stagnant unemployment pool, rising long-term unemployment and tougher competition for jobs among the unemployed than in most OECD countries. Moreover, a significant component of the unemployed, and even of the long-term unemployed, have a strong labour market attachment and in some instances a large stock of accumulated human capital. Although their work profile may be overspecialised if not obsolete, they have the potential for adapting relatively quickly to new tasks. They may be therefore the typical target group for measures like further training and retraining. Most likely, it is not efficient to target the "problem-groups" (unskilled, low-educated, older workers, etc.) for further training and retraining as they, after the completion of the scheme, will have to compete with a large pool of unemployed who are probably better motivated and certainly in possession of much more accumulated human capital. Instead, problem groups could be targeted for public work programmes and subsidised employment schemes.

The net distortive effects of ALMPs can be larger in transition economies than in mature western economies. For example, most studies analysing public employment programmes for minorities in the US have found large fiscal substitution effects. These were mitigated, though, by an increase in equity as minority persons were employed by local authorities instead of persons from the core of the employment pool. The latter found employment outside the public sector with relative ease. In transition economies, in contrast, even persons from the core of the employment pool have great problems finding re-employment once they flow into unemployment.[3] For example, nurses who are substituted by persons on the intervention works scheme (wage subsidy scheme) in Polish municipal hospitals are in general not re-

[3] The Czech Republic and Russia might also here be exceptions.

employable in the private sector. Thus fiscal substitution effects can be more detrimental in transition economies than in OECD countries.

One strand of policies contributing to the solution of regional mismatch in OECD countries focuses on helping the unemployed move to regions with better employment opportunities. Further training and re-training schemes can be an important ingredient in such policies, although more direct interventions by government like subsidising public housing in high opportunity regions and government contributions to moving expenses are more prominent components of OECD policies intent on "taking the workers to the work" (Jackman, 1995). As there are very high barriers to mobility in transition economies[4] ALMPs like further training and retraining which in OECD countries also increase the mobility of workers might be rather ineffective when combating regional mismatch in CEE.

The second strand of regional policies of "bringing work to the workers", i.e. creating jobs in high unemployment regions, involves investment grants or subsidies to firms if they locate or undertake new capital investment in such regions. As nearly all governments in transition economies have severe budgetary problems and these traditional regional policies are very expensive, it is inconceivable that such policies will solve regional mismatch to any degree in transition economies. What might be relatively useful in this context, though, is the targeting of subsidised public employment in high unemployment regions.

Further training and retraining is in principal an important tool to combat skill mismatch in transition economies. However, in the light of the above stylised facts of labour markets in transition it seems questionable whether targeting these measures at identified problem groups can be efficient.

In the fight against long-term unemployment the Restart Programme in Britain seems to be an especially effective tool. The long-term unemployed are invited to a counselling interview which is supposed to help the long-term unemployed find out about available vacancies and training courses. Such an interview might also help employment offices weed out those who are not interested in taking up work. Both White and Lakey (1992) and Lehmann (1993a) find that in Britain the stock of long-

[4]Because there is a severe housing constraint inherited from the old regime and to date no housing policy exists, which could help promote the movement of workers to high opportunity regions, transition economies are characterised by such high barriers to mobility (cf. Boeri and Scarpetta, 1995). The available empirical evidence from the supplement to the August 1994 wave of the Polish LFS (Góra and Sztanderska, 1995) shows virtually no inter-voivodship mobility while, for the Czech Republic, Erbenova (1995) finds that people commute but do not move to high opportunity regions.

term unemployment has been substantially reduced through the application of the Restart Programme. Other OECD countries have, consequently, adopted similar measures to fight long-term unemployment (e.g. Germany and Ireland). In transition economies large programmes similar to Restart do not exist yet, even though long-term unemployment is clearly one of the major problems. Whether the more conventional forms of ALMP (**b**, **c** and **d**) which are applied in transition economies are, on the other hand, effective might be doubtful in the light of the above presented stylised facts.

III Active Labour Market Policies in the Czech Republic, Hungary and Poland

Tables 1 and 2 show public expenditure and participant inflows in labour market programmes for Hungary and the Czech Republic. In these tables the classification of the OECD is used when describing labour market policy measures. The Polish data will be presented and discussed separately below. When inspecting the tables one should keep in mind the differences in the unemployment rates for Hungary and the Czech Republic for the years 1992 and 1993. (12.3 and 12.1 for Hungary versus 2.9 and 3.1 for the Czech Republic).

Looking at the expenditure patterns of OECD countries (cf. OECD (1993), Table 2.B.1 and Chart 2.1) two points stick out. With the exception of Sweden all countries with a substantial unemployment rate spend more on passive than active policies. With this being the case expenditures are higher the higher the unemployment rate. It, therefore, comes as no surprise that Hungary with its relatively high unemployment rate has expenditures on labour market policies which are (in terms of percent of GDP) comparable to many OECD countries. Among those countries which in 1992 had similar unemployment rates as Hungary only Belgium spent decisively more on labour market programmes in general and on ALMPs. Britain, on the other hand, having an average unemployment rate of 10% in that year spent somewhat less on total labour market policies and a lot less on ALMPs than Hungary (!), while Canada spent exactly the same percentage of GDP. This international comparison certainly leads to the conclusion that as far as expenditures on the labour market are concerned Hungary does not perform worse than most OECD countries.

The Czech Republic, on the other hand , has for the reported period spent less on labour market policies than virtually all OECD countries if our GDP measure is

used.[5] For the period 1990-91[6] Japan's expenditure on labour market policies was 0.45% of GDP. The other "low spender" among the OECD countries, Switzerland, spent 0.39% of GDP in 1990 and 0.63% of GDP in 1991. Both these countries had extremely low unemployment rates for the reported period. Comparing Czech expenditures with the expenditures of OECD countries it seems, therefore, clear that ALMPs cannot be the sole cause of the on average low unemployment rate in the Czech Republic relative to other transition economies. It is true that the Czech Republic is the only country among the Visegrad states which has a high proportion of expenditure on ALMPs throughout the reported period and which has spent more than 50% of total expenditure on ALMPs in 1992. Nevertheless, if ALMPs were mainly responsible for the low unemployment, the Czech government would have to spend for active measures on a level at least comparable to that of Sweden. In 1990-91, when the Swedish unemployment rate was still similar to the unemployment rate of the Czech Republic, Sweden spent 1.69% of GDP on ALMPs, while the highest Czech expenditures were 0.33% of GDP in 1992. Furthermore in 1993 when expenditures on ALMPs fell relative to passive measures the unemployment rate hardly increased.

However, when the unemployment rate is within low bands as is the case in the Czech Republic, ALMPs can have a dramatic effect on the unemployment rate. The changing expenditure pattern for 1991-1993 makes this point. With de-registration of employment schemes participants the big jump in expenditure on such schemes from 1991 to 1992 results in a fall of the unemployment rate caused entirely by increased outflows from unemployment.[7] In 1993 expenditure patterns became close again to those of 1991. This seems a desirable development as the spending of scarce financial resources on ALMPs to push the unemployment rate from 3.1% to 2.9% is certainly somewhat odd. The government might have also recognised the disincentive effects of a too low unemployment rate.

Summarising this point, with low levels of unemployment ALMPs could be used by the Czech government to have a marked effect on the overall unemployment rate. The for the whole period reported levels of unemployment which are not only low relative to other transition economies but also relative to most OECD countries

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[5] However, in terms of unemployment expenditure on labour market policies is quite high.

[6] More recent data are not available.

[7] According to own calculations, the unemployment rate for 1992 would have been 5.1% in the absence of theses schemes (assuming no substitution effects or dead weight losses).

cannot, however, be explained entirely by ALMPs. Other determinants that might have some predictive power will be discussed in the next section.

Hungary has a quite high proportion of expenditure on public employment services and administration, roughly comparable with the "high spenders" on this item in the OECD group, while the Czech Republic has an average value for this category of active policy. What is especially interesting, though, is the fact that the Czech Republic spends only negligible amounts on labour market training and the vast bulk of its funds designated for active measures on subsidised employment and work experience for school leavers. Hungary seems to have a more balanced approach with expenditure on labour market training being an item of growing importance. One should add that although Hungarian employment offices also have to provide further training for youngsters who have only eight years of elementary schooling these expenditures are not included in Table 1. The most important Czech and Hungarian ALMPs are described in annex 1.

The ratio of participant inflows (as a percentage of the labour force) over expenditure (as a percentage of GDP) can be used as a rough measure of the average quality of labour market training. A high value implies that on average many participants have been put through training and/or the average value added of such courses has been low. Among the countries in the OECD group where this measure can be calculated not many have a lower value than Hungary. Only Sweden has with 4.6 in 1992 a clearly lower value, while countries like Germany and the United Kingdom have values that are low relative to many other OECD countries but comparable to the 6.3 and 5.91 Hungary has in 1992 and 1993. As Germany has relatively lengthy training courses with on average substantial value added this can only mean that Hungarian labour market training is of relatively high quality. The question whether this labour market training has increased re-employment probabilities of the unemployed cannot be addressed with this type of analysis, it will be pursued in the next section. The Czech values of this measure vary between 10 and 34, pointing to larger throughput and/or lower human capital enhancing content than in the Hungarian case.

Table 3 and 4 give Polish labour market policy expenditure for the years 1990 to 1993, while Table 5 presents the yearly participant inflows for various active measures. The figures for ALMPs expenditure in Table 3 are the official figures published by the Polish Ministry of Labour. They are strongly inflated since apprenticeship training, undertaken in most countries by the regular educational system, is in Poland counted as an ALMP measure. Having taken out the

expenditure on apprenticeship training the entries in the last row of Table 3 give adjusted percentages of GDP which have been spent in Poland on ALMPs. With somewhat higher unemployment rates than Hungary, Poland's overall expenditures on labour market policies were substantially lower in 1992 and 1993. The expenditures on ALMPs were dramatically lower for Poland whether we take the official or the adjusted figures.

Analysing the adjusted figures, the percentage share of expenditures on ALMPs from the "Labour Fund"[8] declined from 32.1% of the total in 1990 to 7% in 1991, fell further to 4.7% in 1992 and recovered slightly to 11.9% in 1993. The steady rise in the number of unemployed benefit recipients forced the government until 1992 to allocate an ever greater share of total expenditures for benefit payments. This development was slightly reversed since the beginning of 1993 when unemployment benefits were no longer open-ended but cut off after 12 months. As far as ALMP expenditures are concerned there has been a shift in the composition of the measures employed. While in 1990 81% of ALMP expenditures went on loans to set up businesses[9], the share of this measure fell to 43%, 21% and 15% in 1991, 1992 and 1993 respectively. The share of Further Training and Retraining, on the other hand, grew from 1% in 1990 to 10% in 1991, reached 17% in 1992 and fell back to 15% in 1993. "Intervention Works" had a share of 18%, 47%, 45% and 39% in the first four years of reform, while Public Works were only introduced in 1992 and made up 17% of all ALMP expenditures in that year and 34% in 1993. The last three measures whose combined share of total ALMP expenditures rose from 19% in 1990 to 85% in 1993 are briefly described in annex 1.

IV Evaluation of Active Labour Market Policies in the Czech Republic, Hungary and Poland

1. How to evaluate ALMPs in transition economies?

In a general framework the effectiveness of an ALMP scheme can, according to mainstream opinion, be assessed answering the four questions which have already been raised in section II.

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[8]A fund set up by the Mazowiecki government in 1989 to finance expenditures of passive and active labour market policies. A mandatory contribution from employers (until the end of 1992 2% of the wage bill, from the beginning of 1993 3% of the wage bill) and transfers from the central budget make up the bulk of the income of the Labour Fund.

[9]This type of loan is comparable to the British Enterprise Allowance Scheme.

To answer the last question about distortive effects of ALMPs solidly one would need a general equilibrium model of transition economies which goes beyond the task of this paper. However, some of the distortive effects (substitution and dead-weight) can in principal be analysed using an augmented matching model..

Public employment (public works) measures might serve as an example to demonstrate the distinction between general and partial equilibrium analysis of ALMPs in transition economies. When the stock of public employment participants is large relative to the unemployed this measure reduces the overall unemployment rate by a noticeable amount as we have with de-registration of public employment schemes participants a one-to-one reduction of the unemployment register as long as there are no substitution effects. The interesting question to ask is then how costly is this reduction of the unemployment stock. To this purpose one would need a cost-benefit-analysis which would also look at possible fiscal substitution effects. The analysis would become more complex if scheme participants "crowded out" other job searchers after the end of the scheme but it would still be of a general equilibrium type.

Public works participants are normally hired for a rather short period (in Poland e.g. for up to 6 months). In a partial equilibrium framework one would ask the following question when evaluating public works schemes: was the unemployed enabled to maintain or increase his/her human capital through his/her perticipation resulting in a higher re-employment probability in a regular, non-subsidised job?[10]

Given the data limitations, distortive effects of ALMPs in transition economies are also empirically difficult to analyse. Nevertheless, a general comment about policy design by the governments of CEE countries might be in order. These governments have undergone a learning process resulting in the formulation of ALMPs which clearly try to minimise distortive effects. While it is always virtually impossible to eliminate dead weight losses, the revised legislation in CEE countries shows the great efforts that have been made to reduce substitution and fiscal substitution effects.

The non-experimental evaluation of ALMPs taking place in a partial equilibrium framework is dominated by two approaches.

[10]A less ambitious aim of public works participation could be the strengthening of labour market attachment by some of the unemployed. To analyse this question one would need to look at LFS data which include statements about participation in ALMPs. Thus far such data are not available.

The first approach looks at earnings of persons and/or their re-employment probabilities who have been on a ALMP scheme and compares them with the earnings/re-employment probabilities of a "control group". Training measures e.g. intended to raise the productivity of participants should be mirrored, ceteris paribus, in higher wages relative to persons with similar characteristics who have not been given training. This approach uses micro data and tries to ensure that unobservable individual-specific determinants of earnings are controlled for (cf. e.g. Ashenfelter and Card (1985). More generally, participation in any ALMP measure should enhance human capital relative to non-participants and should express itself, ceteris paribus, in higher re-employment probabilities than those who have not participated.

The second approach, known as "transition methodology"[11], uses in one application flow analysis of administrative macro data to establish the overall effect of a measure on outflows from unemployment. The idea behind this approach, formulated by Haskel and Jackman (1988) among others, is that a measure which is administered on a large scale can only be considered effective if there is a statistically significant positive correlation between such a measure and outflows from unemployment. One of the strong points of such an approach is the ability in principal to take account of dead weight loss and substitution effects. For example, if we model the determination of overall outflows from unemployment, a positive impact of a measure can be considered its net effect after all distortions have been accounted for.

A very simple and general model of an outflow function might be presented to heuristically demonstrate how ALMPs can be evaluated.

$$O = f(x_1; x_2), f_1 > 0, f_2 \leq 0 or \geq 0.$$

Outflows from unemployment (O) are determined by a vector of labour market variables ($\mathbf{x_1}$) - the stocks of vacancies and unemployment plus a time trend - and possibly by some or all elements of a vector of ALMPs ($\mathbf{x_2}$), where f is a general function. An econometric test of the effectiveness of ALMPs consists then in establishing whether elements in vector $\mathbf{x_2}$ have some predictive power. Such a test is especially sensible if the application of an ALMP scheme does not entail

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[11] In general the term "transition methodology" refers to analyses of **transitions between different labour market states** using micro or macro data. Such analyses were undertaken in developed market economies since the early seventies.

automatic de-registration of the unemployed participants.[12] For example, the Restart programme in Britain does not mean that the unemployed move automatically off the register, so a positive correlation between the Restart measure and outflows from unemployment does imply that the programme has improved the search effectiveness of some of the unemployed. In the Polish case hirings of the unemployed into regular jobs will be regressed on the stock of vacancies and unemployment and the (lagged) stocks of participants of retraining and further training. In Poland persons entering a training scheme do not leave the register. With a lagged training variable one can, therefore, test the effect of training on hirings of the unemployed: after having participated in a training scheme unemployed individuals might find a regular job more readily than those who have not participated. Using such estimates of outflow functions, based on aggregate data, has the advantage that it allows the detection of additional net hirings after substitution and dead weight effects concerning the stock of unemployed have been accounted for.

The "working horse" giving economic content to models of outflows from unemployment is the matching function where in its simplest form unemployed job searchers are matched with vacant jobs. In this context ALMPs can be thought of as measures which facilitate this matching process. When ALMPs are added to the stock of unemployment and vacancies as factors potentially determining job matching we speak of an "augmented matching function". Below, such a function is used to evaluate Further Training and Retraining in Poland.

As a second application of transition methodology, "problem groups" in the labour force are identified by Markovian analysis of flows between the labour market states employment (E), unemployment (U) and not-in-the-labour-force (N).[13] On the basis of LFS data transition probability matrices (P) of the following type can be estimated for specific groups of the labour force:

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[12]For a critique of applying augmented matching functions even when ALMP participation implies de-registration see Calmfors (1994).

[13]The assumption that movements between labour market states are governed by a Markov process implies that the transition probabilities depend only on the state currently occupied. Applications of Markovian flow analysis to Western labour markets are Marston (1976), Toikka (1976) and Clark and Summers (1979,1982a,1982b), among others, while applications to a labour market in transition are Abraham and Vodopivec (1993), Bellmann et al. (1995), Góra and Lehmann (1995), Foley (1995) and Steiner and Kwiatkowski (1995). The Markovian assumption can be considered appropriate for a transition economy subject to a sudden structural shock, where individual work histories will be of lesser importance.

$$P = \begin{bmatrix} P_{EE} & P_{EU} & P_{EN} \\ P_{UE} & P_{UU} & P_{UN} \\ P_{NE} & P_{NU} & P_{NN} \end{bmatrix}$$

where e.g. P_{EU} denotes the transition probability of an individual who has been employed at the beginning of period t-1 and who is unemployed at the beginning of period t. Such matrices give a richer picture of the labour market situation of specific groups than the computed inflows into and outflows from unemployment ((P_{EU} + P_{NU}) and (P_{UE} + P_{UN}) respectively) and the reported unemployment stocks.

2. Data availability and quality

The assessment of ALMPs in transition economies is still in its infancy. Data availability and quality are quite limited which renders evaluation difficult. Across the countries of interest different data sets are available to analyse the effectiveness of ALMPs.

In Hungary there have been some surveys which allow to identify "problem groups" and perform impact analysis on the retraining and public employment measures using micro data. The unemployment flow data from the available administrative data, on the other hand cannot be used for aggregate impact analysis using "transition methodology" as the data only include benefit recipients.

In Poland these administrative data cover all individuals who register as unemployed, stocks and inflows of ALMP participants and the flow of unemployed hired for "regular", i.e. non-subsidised jobs as well as stock and flows of notified vacancies. The estimation of augmented matching functions is, therefore, possible in the Polish case. The Polish LFS data, on the other hand, did not contain any data on labour market policy participation in the past. To allow for the analysis of Polish ALMPs using micro data a supplementary questionnaire was added to the August 1994 survey containing mainly questions related to labour market policy (cf. Góra and Sztanderska (1995)). The data resulting from this supplement have now become available and should enable researchers to evaluate ALMPs in a transition economy at a technical level comparable to Western evaluation studies. For this paper the impact analysis of Polish ALMPs is, however, confined to the above mentioned estimation of augmented matching functions and to the presentation of some raw data from the supplementary questionnaire.

It has been thus far a difficult task to secure LFS data from the Czech Republic which would allow impact analysis of ALMP at the micro-level while Burda and Lubyova (1995) have used regional macro-data to estimate the contribution of ALMPs to outflows from unemployment. Their paper will be discussed, however, in the general Czech context within which ALMPs are embedded. With a very low unemployment rate the most interesting question has to be whether ALMPs are mainly responsible for this rate or whether there are other powerful determinants.

3. Evaluation of ALMP for specific countries

3.1. Hungary

3.1.1. Characterisation of the unemployed receiving benefits

One of the best analyses of the insured unemployed in Hungary can be found in Micklewright and Nagy (1994). The following section is mainly based on their paper but also uses some information from Szemlér (1994) and from the survey of benefit exhaustees performed by Lázár and Székely (1994).

The analysis provided by Micklewright and Nagy is based on the cohort of people flowing *from employment* into unemployment insurance (UI) receipt in March 1992, giving approximately 40.000 spells. Only 40% of the stock of unemployed is covered by insurance as of August 1994. However, the results of their analysis are extremely interesting insofar as even the most privileged unemployed in Hungary , i.e. those who receive benefits, have on average a poor labour market experience expressing itself in relative to OECD levels very low outflow rates from unemployment (Boeri, 1994 and Micklewright and Nagy, op. cit., p. 10).

Micklewright and Nagy essentially document inflow into and outflow rates from insured unemployed disaggregated by the elements of the following set: {sex, age, education, occupation (manual or non-manual), region}. Their results are now briefly presented and discussed.

Inflow rates into insured unemployment

The monthly inflow rates estimated by Micklewright and Nagy are roughly comparable to those of most European OECD countries during recession and definitely not high by OECD standards. More interesting than this result are the presented relative magnitudes of the inflow rates calculated for the elements of the

above mentioned set. Hungary is an exception in transition economies insofar as the female unemployment rate is lower than the rate for males. This is entirely due to a lower inflow rate into unemployment (0.80% versus 1.14%). This lower inflow rate can in turn be explained to a great degree by the different occupational structure of male and female employment, with half of all females in non-manual jobs and only a quarter of all males in such jobs. As manual workers have on average an inflow rate which is about 3.5 times larger than for non-manual workers, more non-manual jobs for women implies a lower female inflow rate into unemployment.[14]

The inflow rates disaggregated by age and education show expected patterns. Younger groups tend to have higher inflow rates than older ones, a finding observed in Western economies as well as in transition economies.[15] For women the variation by age is, however, not as strong as for men. Educational attainment and inflow rates into unemployment are inversely related, with the special finding that persons with a vocational background have the same high inflow rate as persons with only primary education. Vocational training before the regime switch seems to have led to skills which are required less than other skill groups as the implied higher separation rate indicates. The often stated notion that there has been over-investment in vocational education in Eastern Europe receives further confirmation by the transition probabilities of the Polish labour market disaggregated by educational attainment which are presented in section IV.3.2.1.[16] Finally, Micklewright and Nagy show that regional inflow and unemployment rates are strongly positively correlated (correlation coefficient of 0.81). Besides Budapest, the regions bordering Austria have the lowest unemployment and inflow rates while regions in the East of Hungary have the highest unemployment and inflow rates.

Outflow and hazard rates from insured unemployment

Micklewright and Nagy first report the exit states for spells of unemployment insurance (UI) starting in March 1992. Most importantly the largest fraction of exits from UI occurs because of exhaustion of benefits (41.9% and 46% for men and women respectively). This hints at the large share of long-term unemployed among

[14]Once controlled for occupational status the differences by sex nearly disappear; manual female workers have a monthly inflow rate of 1.24% (men 1.41%) while non-manual female workers a monthly inflow rate of 0.36% (men 0.38%).

[15]The same pattern is observed for eastern Germany in the period 1990-1991 by Bellmann et al. (1995) and for Poland in the period 1992-1994 by Góra and Lehmann (1995).

[16]In Poland the transition probability P_{EU} is for both men and women with vocational background much larger than for any other educational group.

the unemployed as maximum entitlement periods for benefit are 18 or 24 months for this cohort. Those who have quit voluntarily have a larger fraction of exhaustees than those who have been laid off (52.9% vs 42.6%). The second largest fraction of exits is into regular employment (37% and 28.8% for men and women respectively) while only 5.5% of the male cohort and 5.2% of the female cohort exit into one of the ALMP measures. The largest measure is training, with proportionately more women participating than men (2.8% of all exits vs 2% of all exits).[17]

The survivor functions for females and males, plotted by Micklewright and Nagy, have the same slope for most spell lengths; only for very long spells does the survivor function for females become flatter than that for men. For all spell lengths the former function lies above the latter, however only slightly, thus pointing to somewhat lower outflow rates from insured unemployment for women. As these differences are small, though, the much lower inflow rates into unemployment cause a smaller stock of female unemployment. However, once unemployed, the experience of Hungarian women is not very different from the experience of women in most other transition economies; they have a lower re-employment probability than men, stay longer in unemployment and have a larger share of long-term unemployment (cf. also Szémlér, op. cit.).

Using a "competing risks" model Micklewright and Nagy estimate the hazard rate into each state separately.[18] Here, only the estimates of three hazards, to go to regular employment, to go to training and to go to public works (the two most important ALMP measures), are discussed.

For both men and women the probability of going to regular employment increases monotonically with education. With the default category being primary education males with vocational education have a 36% higher hazard than the base hazard, while males with university education have a hazard which is 89% higher. For women we have a similar relationship between the hazards (an increase of 16% for vocational, an increase of 59% for university education over the base hazard). Higher age means roughly a lower probability of flowing into regular employment. With a base group of the 21-25 years aged, all older groups have a lower re-employment probability. The age groups standing before retirement (over 56 years

[17]The remaining categories of exit are disqualification and normal or early retirement.

[18]"The hazards of exit to different states are assumed independent and we estimate this 'competing risks' model by successively maximising the likelihood with respect to the parameters of the hazard of each state j while treating as censored all exits to states other than j." (Micklewright and Nagy, op. cit.,p. 13)

for men and between 51 and 55 years for women) have only approximately one tenth of the re-employment probability of the base group. Not only for insured unemployed but also for exhaustees are age and educational attainment powerful predictors of flowing into employment (cf. Lázár and Székely, op. cit., p. 8). Boeri's (1994) contention that individual characteristics are not significant determinants of outflows from unemployment is, therefore, not supported by the evidence of the discussed Hungarian micro data sets.

The estimated hazards to go to training for men and women seem to indicate a wrong targeting of this ALMP measure. Those people who have a relative higher probability of flowing into regular employment, i.e. the young and the well educated, also have a relative higher probability of being taken onto a training scheme. In other words, those unemployed who seemingly have the least difficulty finding re-employment on their own are above all targeted for training measures. That Hungarian employment offices engage consciously in "creaming off" when targeting training measures will be discussed below. The estimated hazards to go to public works show for men an inverse relationship between education and the probability of entering the scheme. This might be a reflection of the type of work performed by men in this scheme or a reflection of targeting the underprivileged among the unemployed. Age is not a significant determinant in this instance. For women who are much less likely to exit into public works education is not a significant predictor of this hazard rate, while non-manual occupation is. That this latter covariate has predictive power points to the often heard fact that municipal administrations use unemployed women in clerical and health care related jobs and that fiscal substitution effects are present in the application of public works.

3.1.2. Evaluation of active labour market policies

Hungary is the only transition economy where "controlled experiments" have been undertaken to evaluate ALMPs. In O'Leary (1994) we find such an experiment to evaluate the Hungarian retraining and public works measures. There, the sample to be evaluated consists of three sub-samples: registered unemployed who did not participate in ALMPs, those who participated in retraining in the second half of 1991 and those who participated in public service employment (PSE) in September 1991. This sample was interviewed in November 1993.[19] The impact analysis of ALMPs looks above all at differences in the re-employment probabilities and earnings of the three sub-samples. O'Leary uses various methods to control for differences in

[19]Strictly speaking, O'Leary's analysis is not a controlled experiment as he does not select persons with the same observable characteristics and then assigns them to the three groups. Instead he tries to control for observable characteristics *ex post*.

observable and unobservable characteristics of the three subsamples. With respect to differences in observable characteristics O'Leary (op. cit.) states the following: "Compared to the sample of registered unemployed those in the retraining sample are significantly younger, more likely to be female, more educated, more specialised in professional and technical skills, much more likely to have worked in white collar jobs, less likely to have received UI since June 1991, less likely to have special problems in finding a job, and less likely to be unskilled. [.....] Relative to the registered unemployed PSE workers tend to be somewhat younger, more likely to be male, less educated, less specialised in either manual or technical skills, much less likely to have worked in white collar jobs, much less likely to have received UI since June 1991, more likely to have special problems in finding a job, and much more likely to be unskilled." This confirms the results of the hazard rate analysis undertaken by Micklewright and Nagy; participants of the retraining measure are on average much "better" than registered unemployed who do not participate in an ALMP measure, while PSE participants are a lot "worse".

There seems to be a conscious policy by the authorities to "cream off" the best candidates among the unemployed for retraining courses as the following quote from an administrator of a retraining centre shows. "Applicants undergo an aptitude test and a health examination [...]. With courses where there are too many applicants, there is a kind of ranking based on the psychology tests results. [...] Recently an attempt was made to encourage training institutions to use specialists *to do deeper examinations to reduce dropouts among retraining participants.* In this field *we are extremely happy about the methods used by the regional retraining center.*" (O'Leary, op. cit., p. 10f., emphasis added). While consciously targeting those individuals with a comparative advantage with retraining might be a very questionable practice,[20] even if one accepted such targeting as appropriate the success of the retraining programme still needs to be investigated. Persons with the more favourable characteristics of the retraining participants might have far higher re-employment probabilities in a regular job than the average unemployed even in the absence of the retraining programme.

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[20]Conventional wisdom, as e.g. expressed by Micklewright and Nagy (op. cit., p. 17), would clearly say that targeting the "best" among the unemployed for retraining courses is a failed policy as these individuals would have the highest chances of regaining employment anyway. Given the very weak labour demand in most transformation economies it is not obvious that targeting "problem groups" among the unemployed for training would in fact increase the chances of such groups for regular employment at all. Therefore, targeting such groups might be highly inefficient.

The simplest way to compare labour market outcomes, in our case consisting of re-employment probabilities and earnings, is to look at the unadjusted mean outcomes of the treated group (i.e. the retraining participants) and the control group (i.e. the unemployed who never participated in an ALMP measure). If the selection of both groups were entirely random, this would be the appropriate method to evaluate the retraining measure. O'Leary computes a re-employment probability of retrainees which is 19.2 percentage points higher than the one for the unemployed without an ALMP measure, with the difference being statistically significant at the 95% level. The also computed difference in earnings (1 500 Forints) is not significant at conventional levels. Once he controls for the difference in observable characteristics of retrainees and unemployed without participation in ALMPs much of the higher mean re-employment probability of the retrainees disappears. Using a synthetic comparison group[21] the difference in the re-employment rate falls to 1.2 percent which was not significant. Average monthly earnings of the synthetic group were, however, lower by 2 052 Forint pointing to the fact that the most productive among the registered unemployed had been chosen for the training measures. Using regression adjusted impact estimates for retraining the difference in the re-employment probability falls to 6.4 percent with average higher earnings of those retrainees in regular jobs of 500 Forint. The latter difference was however not statistically significant. To take account of possible differences in unobservable characteristics of the retraining and comparison groups O'Leary produces selection bias corrected impact estimates of the retraining programme. These estimates give a re-employment probability 32 percentage points higher for the retrainees with 23.5 percentage points due to observable characteristics and 8.9 percentage points due to selection bias.

Whatever the method used to adjust for observable and unobservable characteristics it seems clear from O'Leary's analysis that the Hungarian retraining programme produces larger re-employment probabilities and higher earnings for the retrainees than for the unemployed not participating in an ALMP mainly because of the observable "better quality" of the former and because of a strong selection bias.

Sub-group analysis of retraining performed by O'Leary shows that "groups considered to be the most difficult to re-employ appear to have gained the greatest help in getting a normal job by retraining, these groups are: older workers, those with less education , and those without a manual trade." (O'Leary, op. cit., p. 18). One could imply from this result that targeting those with comparative disadvantages in

[21]It is constructed by choosing *with replacement* for each retrainee that person of the comparison group which has the closest observable characteristics.

the labour market will generate the largest gains. As this sub-group analysis admittedly does not consider selection bias a plausible explanation of the quoted result could be that given the vetting process only the most motivated among the older and less educated workers are chosen and that in these age and educational groups motivation is a much more important determinant of gaining re-employment than among younger and more educated workers.

Summarising this section on the evaluation of Hungarian retraining measures, the "best" among the unemployed are targeted for this measure, once controlled for observable and unobservable characteristics the greater chances of re-employment of those who have completed a retraining course compared to the unemployed who have not participated in an ALMP diminish dramatically. Members of "problem groups" among the unemployed *if taken on the retraining scheme* have the highest re-employment probabilities. This result is achieved without controlling for selection bias. A possible inference from this result could be that "problem groups" among the unemployed should be targeted *and* members of these groups carefully vetted for motivation, flexibility and intrinsic ability. This combination of targeting and vetting might give the "biggest bang" for the expenditure on retraining.

The evaluation of the Public Service Employment (PSE) scheme tries to correct for the mentioned sample selection, with the "worst" among the unemployed being selected, using the same three approaches that were discussed in connection with the retraining measure. Unadjusted impact estimates give a lower re-employment probability for PSE participants of 16.4 percentage points compared to the unemployed who have not participated in an ALMP. If one corrects for observable and unobservable characteristics this value is only slightly lowered; depending on the method used the value ranges between 13.3 and 16 percentage points. This hardly changing re-employment probability whether controls are used or not can be got because the duration of unemployment is not a characteristic controlled for by O'Leary and many of the PSE participants are from the pool of the long-term unemployed who in the absence of an ALMP might have lower re-employment probabilities because of loss of human capital, lower search efforts or outright discrimination by employers. Clearly, participating in PSE seems to be ineffective insofar as it does not rebuild human capital, boost search efforts or improve the image of the long-term unemployed individual. A second explanation for the virtually constant re-employment probability across the different methods of impact analysis could be that participation in the scheme is a negative signal to the employer. From OECD countries negative signalling problems arising from the participation in certain schemes is a well known fact.

In most transformation economies programmes like the Hungarian PSE are conceived to mainly promote equity; those with long spells of relatively low income are given access to employment which temporarily gives them higher income.[22] The success of a programme like PSE should, therefore, not necessarily be judged by whether it enhances the chance of regaining regular employment. If, however, PSE participation generates a negative signal to prospective employers, thus lowering re-employment probabilities, equity gains have to be weighed against the efficiency losses due to the programme.

Finally some results of the study by Frey (1993) are presented in order to above all discuss possible distortive effects of PSE. The main, very limited data base for this study was generated by a survey of PSE contract employers in two counties (Jász-Nagykun-Szolnok and Tolna).

One major problem of the implementation of PSE is the conflict of interest between the labour offices and prospective employers many of which are municipal authorities. The latter would like to employ capable and reliable workers chosen by themselves for long periods of time while the labour offices are mainly interested in placing temporarily into these jobs as many people as possible who without assistance would have great difficulties in finding any job.

Some of the local authorities clearly see PSE as a tool to provide certain services to their community at lower costs or to provide services which they otherwise would not have provided at all. In both cases certain distortive effects which are well known in OECD countries when analysing public employment can be present. From the above mentioned survey of PSE contractors the following emerged:

dead weight loss was a minor problem; only 2.5% of PSE workers performed jobs which were actually permanent jobs but had been renamed as PSE jobs.

Among the contractors 12% *substituted* PSE workers for their own municipal workers.

Fiscal substitution was a slightly larger problem, 15% of PSE contractors increased their numbers of PSE workers while decreasing the number of their own employees.

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[22]For a discussion of the similar Polish Public Works programme see the next section.

Displacement of output effects seemed to be quite strong as local governments often wanted certain work done by their subsidised PSE employees which previously had been given to outside private entrepreneurs. From the result of the survey one can infer that this effect has an upper bound of 24% of work done by private entrepreneurs in the absence of the PSE programme.

Even though the mentioned distortive effects are not very strong the fact that virtually all possible such effects seem to occur points to a poor design of the PSE programme which in addition, as previously discussed, does not produce any efficiency gains.

3.2. Poland

3.2.1. The identification of some "problem groups"

As a first task one might try to identify "problem groups" in the Polish labour market in general and among the unemployed in particular. The data used for this exercise are the data from the PLFS. There are two major advantages using LFS data; the picture one gets of the Polish labour market is richer than if one only used register data and unemployment is consistently defined along ILO-lines. The estimation of transition probabilities is done separately for men and women as the labour market experiences are quite different for the two sexes (cf. e.g. Boeri, 1994, OECD, 1993, and Góra and Lehmann, 1992 and 1995). After this partitioning of the sample the data are further disaggregated by education, age, duration of unemployment (for the stock of male and female unemployed) and transition probabilities are then estimated for the various sub-groups.[23]

Yearly transition probabilities are estimated since, with the relative fine disaggregation of the data, quarterly flows (they can in principle be estimated) are often too infrequent for some of the categories to arrive at statistically meaningful estimates. The estimation of yearly transition probabilities does not cause major problems as far as flows out of employment and from the not-in-the-labour-force state are concerned. However, the estimated yearly probabilities out of unemployment should be taken with caution as they are subject to downward bias due to substantial round-tripping over the year. The PLFS data allow the construction of two yearly panels, May 1992 to May 1993 and May 1993 to May

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[23]The important issue of regional diversification in the Polish labour market using Markovian flow analysis has been investigated by Góra and Lehmann (1995). It will not be addressed here.

1994. For the economy as a whole the differences in the entries of the transition probability matrices for the two periods are not statistically significant (Góra and Lehmann, 1995). Without much loss of generality the period May 1992 to May 1993, when slightly a larger number of transitions occurred, can be chosen for the analysis.

Before discussing the transition probability estimates, some stock variables of table 6, namely participation and unemployment rates as well as LTU shares for men and women by age, will be briefly analysed for the data points May 1992 and May 1993. The different experience for men and women in the Polish labour market can be seen by the unemployment dynamics and the May 1993 entries where with all age groups unemployment rates are higher for women than for men and where for all but one age group LTU shares are much higher for women. A larger LTU share means, of course, lower outflow rates from unemployment; women have, therefore, less opportunities to regain employment than men. In fact, job accession rates which can be computed from transition probability matrices[24] (the sum of the flows UE and NE) are with all age groups larger for men than for women. The female LTU shares would be reduced by increased labour force exit of the long-term unemployed women. That women in Poland do not exit the labour force more than they enter it in the reported period can be seen from the fact that women's participation rates do not decrease over time; with the exception of one age category between May 1992 and May 1993 these rates *stay constant or increase*. The age groups under 55 years of age have participation rates which are high relative to most OECD countries, as long as women have similar unemployment inflow rates like men and lower unemployment outflow rates these participation rates contribute to higher female unemployment rates and LTU shares.

While the higher unemployment incidence among Polish women is a well known fact which has been discussed *in extenso* the much higher unemployment rate among the young (< 25 years of age) for both genders needs further discussion. At first glance this age group seems to be *the* "problem group" among the unemployed. Compared to the next three age groups its unemployment rate is between 90% and 270% higher if we take all four data points into consideration. Using Polish register data, Schmidt (1994) has shown that these differences disappear when participation rates among the young are assumed to be similar to those in Sweden and Germany. Schmidt moots that because of a large shadow economy in Poland where especially the young have gainful employment opportunities low participation rates among the

[24]These matrices are not presented here but available upon request.

young reflect false reporting of being not in the labour force. To demonstrate Schmidt's proposition and to check its validity with LFS data a simple arithmetic exercise will be undertaken. Let's take the example of young males in May 1992, where the unemployment rate of this group is 23.1% and the participation rate 46.9%. Let's have the (unrealistic) assumption that in all age groups no person among the identified unemployed works in the shadow economy. Assume then that the "true" participation rate among young males is 65%, the rates one finds in e.g. Sweden and Germany for this age group. The difference between 46.9% and 65% is then due to unreported employment of the young in the shadow economy. Given these assumptions, the imputed "corrected" unemployment rate for young males is 16.6% instead of 23.1%. Under similar assumptions a participation rate of 55% for women implies, again for May 1992, a "corrected" unemployment rate of 20.6% instead of 30%. When a percentage of those employed in the shadow economy is falsely reported as unemployed and this percentage is constant across age groups, the gap between the unemployment rates of the young and of other age groups narrows further.

This arithmetic exercise is not meant to find the "true" unemployment rates for young males and females. It is meant to point to the dangers of readily identifying "problem groups" and targeting labour market policies at them. In the Polish case, the participation rates of the young, very low in international comparison, need to be closely investigated. Alternatively to employment in the shadow economy such low rates could also imply that the young see opportunities from education which are greater in an economy of transition than in mature Western economies. The validity of this explanation of low participation rates would mean that the unemployment rates of the young were indeed as high as shown by the LFS data.

Whatever the reasons for the low participation rates one should point out, however, that even after the "correction" of the unemployment rates, the LFS data still produce a higher incidence of unemployment for young males and females than for any other age group in Poland. So these groups should be targeted anyway even if the amount of targeting depends crucially on which of the two scenarios is valid.

Men and women over 55 years but before retirement age have a relatively weak labour market attachment as their relatively low participation rates show. Also, if we ignore the groups above 65/60 years of age, their job accession rates are by far the lowest among the age groups while their labour force exit rates are at least twice as high. The relative values of both types of rates might hint at a discouraged workers effect which might be quite strong in transition economies and which artificially

lowers the unemployment rates of these age groups[25] (cf. Schmidt, op. cit.). An alternative explanation for the in comparison with OECD countries low participation rates of older workers could lie in the difficult working conditions of many production workers before the regime switch. The "physical" capital of many of these workers might have been used up more rapidly than of comparable workers in Western economies where advanced technology makes work less physically strenuous. When this explanation is valid, targeting ALMP measures at older workers is certainly inefficient.

Research into the causes of relatively low participation rates of young and older workers seems to be an important prerequisite for the formulation of ALMP in Poland. Such research could establish whether these participation rates are genuine or whether the unemployment rates of the young or older workers are severely upward or downward biased.

The long-term unemployed seem to be a "problem group" that need to be targeted as the high LTU shares in May 1993 for all age groups show. Between May 1992 and May 1993 the unemployment rates are slightly falling for most age groups while their LTU shares rise spectacularly. These dynamics will come about by very low overall outflow rates from unemployment and relatively constant inflow rates into unemployment.

The yearly transition probabilities out of the state of unemployment, shown by duration of unemployment for men and women separately in table 7, imply in comparison with OECD countries very low outflow rates from unemployment. The outflow rates are higher for men than for women, these higher rates are entirely driven by larger male job accession rates as labour force exit rates are with the exception of the last category substantially larger for women than for men. Most importantly, though, duration does not seem to be a determinant of either job accessions or overall outflows from unemployment. While long-term unemployed men do have a higher labour force exit rate than the other duration categories they also have larger job accessions than the preceding duration category. Long-term unemployed women, on the other hand, have the third highest job accession rate and the *lowest* labour force exit rate.

[25]If we take males in May 1992 and assume that 20% of those reporting to be outside the labour force are discouraged workers who would be unemployed if in the labour force, the unemployment rate of males between 55 and 64 years of age would shoot up from 7.2% to 22.4%!

These results should be taken with caution, though. As inflows into public employment and wage subsidy schemes are large relative to hirings[26] and as the long-term unemployed are specifically targeted for these measures the over-representation of the long-term unemployed among participants can lead to a strong upward bias of the job accession rates for this latter group.

The estimated transition probabilities would imply little or no state dependence for the pool of the unemployed. Below we will return to this issue when an augmented matching function is estimated for Poland. Nevertheless, whether there is state dependence or not, targeting the long-term unemployed with ALMPs in Poland seems rather an equity than an efficiency issue. With an overall demand for labour which is very weak the long-term unemployed should be targeted because some of the scarce resource employment should be redistributed to those who have suffered from a long spell of relatively low income..

The last disaggregation of the LFS flow data that will be discussed concerns education. Several points can be made from the inspection of tables 8 and 9 which give labour market transition probabilities for men and women separately and of table 10 which presents participation rates, unemployment rates and LTU shares, again for men and women separately.

First, for men, if one ignores the elementary and incomplete schooling categories which have far lower participation rates than the other categories, education and the level of unemployment are inversely related. For women this correlation is also present but less strong.

Secondly, secondary general, but above all elementary and incomplete schooling means a far lower attachment to the labour market than the other educational categories. In fact, the only two educational categories with decreasing participation rates for men and women are elementary and incomplete schooling. These two categories have by far the largest labour force exit rates from the state of employment (the probability P_{EN}), for both men and women while their inflow rates into unemployment (the sum of P_{EU} and P_{NU}) are compared to most other categories low. The already weak labour market attachment of the least qualified groups seems to become even more marginal as transition occurs. In the Polish case, targeting ALMPs at these two groups in order to strengthen their labour market attachment seems under the conditions of the transition, i.e. weak labour demand

[26]Between May 1992 and May 1993 the ratio of public employment and wage subsidy participants to hirings was 0.31.

and a large pool of the unemployed with strong labour market attachment, a misguided policy.

Thirdly, a "problem group" easily identifiable are men and women with vocational training. For all data points this educational category has the highest unemployment rate with an above average participation rate for men and a slightly below average participation rate for women if we only consider the first five most qualified groups. The relative low job accession rates and high inflow rates into unemployment of persons in the vocational category might be an indication of the fact that human capital acquired by this group before the regime switch has depreciated relatively faster than the human capital of other educational categories. Vocational training in socialist economies has produced very narrow and inflexible work profiles many of which are virtually useless under the new conditions. Alternatively, educational category which is *not* a good proxy for qualifications might be a good indicator of unobservable individual characteristics; persons with more education are more flexible and dynamic and have a better understanding of how to adapt to the new economic environment. Whatever the reasons behind the bad labour market experience of persons with vocational education in Poland, they are a large group among the population with strong labour market attachment and should be consequently identified as one of the primary group at which ALMPs should be targeted. Whether training measures increase this group's re-employment probabilities and should, therefore, be the chosen policy tool is, however, an open question as there exists an abundant supply of people who are unemployed, much better prepared for further training and retraining courses and have more desirable characteristics as far as prospective employers are concerned.

Finally, LTU *shares* are not a function of education. Yearly outflow rates from unemployment are uniformly low in international comparison and result in large shares of LTU no matter what the educational category. This is further evidence of very weak labour demand generating a stagnant pool of unemployment in Poland.

3.2.2. Analysis of raw data of supplement to August 1994 PLFS on labour market policies

The supplement on labour market policies added to the PLFS in August 1994 produced the first data set in Poland as far as active labour market policies participants are concerned. In future, questions of how or whether participation determines higher earnings or re-employment probabilities can be investigated with

this data set by matching labour market outcomes with the characteristics of the individuals. For the time being, we just look at some outcomes and the frequency distributions of the given answers to get a hunch about the effectiveness of the various ALMP measures. Besides loans to start a business, intervention works (wage subsidies), public works and training measures for the unemployed, the job brokerage function of labour offices is also discussed. To generate the largest possible numbers of ALMP participants individuals who have been registered as unemployed in a labour office at least once between January 1990 and August 1994 were asked whether they *at any time* after January 1990 had been or were involved in a scheme. In some instances this makes inferences more difficult.[27]

Loans to start a business

Of those individuals who identified themselves as having registered at a labour office at least once between January 1990 and August 1994, 3.3.% had asked at any time after January 1990 for a start-up loan. Successful with their application were in turn 24.2%. Roughly 60% of those acquiring the loan had created a work place for themselves which still existed during the surveyed week, 31% had created such a work place, but it no longer existed while only 10% were unable to use the money for establishing work for themselves. Given the data, one evaluation criterion that can be used is the duration of a thus created work place. The mean duration of the observed *completed* spells of scheme participants is 20 months. The government has set 24 months as the lower limit beyond which only 50% of the loan has to be repaid. The average duration of *all* spells in the sample should be longer than 20 months and could be quite a lot longer as the sub-sample of the completed spells gives the sub-sample of all those who have "failed" in their business activities.[28]. Labour offices seem, therefore, to have been successful in their vetting of loan applications. Since there are probably only small displacement of output effects the quite impressive duration figures seem to indicate that start-up loans are a relatively efficient ALMP measure in Poland and maybe should be extended. One question which certainly still needs to be investigated is whether dead weight losses occur with the application of this measure. This is left to later work.

[27]The below presented results are not always statistically representative, though. They are just meant to give us a hunch about developments of Polish ALMPs.

[28]In our sample 18 out of 57 self-employed work places have been terminated. With 18 loans granted in 1990 in our sample, and assuming that some of the failures have occurred in subsequent years, this must mean that some of the in 1990 created businesses still existed in August 1994.

The previously often heard criticism that these loans entailed amounts not sufficient to set up a business (cf. e.g. Lehmann, 1992) does not seem to be borne out by the data and is, furthermore, only voiced by 11% of those unemployed who did not apply for a loan. A majority of those not applying for a loan said that they were not able to run their own business (39%) or that they did not know about the existence of the scheme (20%).

In summary, only a very small minority of the unemployed applied for a start-up loan, the loan applications seem to have been vetted relatively well as the average duration of a thus created business most likely has been in excess of two years.

Intervention Works (Wage Subsidies)

Approximately 9% of those having registered at a labour office at some point in time were offered a slot on the intervention works scheme. Nearly one third (32%) of the then unemployed to whom these offers had been made rejected them. To shed some light on this relatively large number one would need to link this outcome with the characteristics of the person (demographic and educational characteristics, duration of unemployment, benefit status). Here, one can just look at the reasons for the end of the work on the scheme. Of those who entered the scheme but are no longer working in the scheme 12.2.% have found regular employment in the same firm which is certainly not a negligible portion of participants. The vast majority of those not kept on (85%) left the firm because the foreseen period of their intervention works job had ended. Most firms clearly take the subsidy and release subsidised labour once the subsidy ends. Furthermore, there is some casual evidence that substitution effects occur and that, especially in the health sector at the municipal level, fiscal substitution effects are also common place. The timely ending of most intervention works jobs indicates, on the other hand, that dead weight loss is not a major problem.

Of course, from the given data we do not know how many found employment in regular jobs in other firms after the period of the wage subsidy ended. However, those not staying on in the same firm in their large majority (60%) do not believe that participating in intervention works increases their re-employment probabilities in the regular labour market. This can be taken as evidence that for most workers on the scheme participation does not enhance their human capital and that they have difficulty finding regular employment.

Public Works

Since public works only started in 1992 the number of unemployed in the August sample who had been offered a public works slot is very small, namely 2%. Most of these slots are in the state sector at the municipal level. 44% rejected this offer; of those who had accepted and already finished their work within the scheme, 8.5% stayed on in the same firm in another capacity. Most people, however, left the firm when the public works they were assigned to were finished. Nearly 65% of these people think that participation in public works has not increased their re-employment probabilities (65%), while 24% did not know. The public works scheme probably prepares the unemployed the least for regular employment. This does not mean, of course, that the benefits of this measure do not outweigh the costs. One can think of this measure as improving equity as some of the long-term unemployed gain access to employment which increases their income at least temporarily. Even when long-term unemployed, who do not receive any longer unemployment benefits, are put on the scheme, as long as the value added of public works production exceeds the difference of the wage and the income support which has to be paid to the long-term unemployed this measure is also more efficient than paying only income support. When public works concentrate on enlarging and improving the infrastructure the social value added might in fact be quite large.

Further Training and Re-training measures

Inspection of the raw data allows only a very limited evaluation of the training measures that unemployed people have been offered in Poland. One statistic to be looked at is the mean duration of such measures. By comparing it to the mean duration of training of all in the sample one might get a hunch about the quality of training measures for the unemployed.

Approximately 6% of those having registered at a labour office had at any time been offered a training course by their labour office. The fraction of those rejecting this offer is large, 45%. Most of the undertaken training courses are paid for by the labour offices (92%). The mean duration of the completed courses is 10.5 weeks, compared to 16.5 for all in the sample who take part in further training and retraining courses. If length is an indicator of quality, on average training courses for the unemployed seem to be of a lesser quality. Unemployed participants in such courses evaluate them, however, rather positively as 51% of them believe that their re-employment probabilities have a little bit improved and 13% of them believe that these probabilities have improved a lot. So, at least as far as the unemployed

participants themselves are concerned, training measures are valued much more than the previously discussed measures of direct job creation. Whether this is an expression of wishful thinking or not can only be established by linking individual characteristics with training participation on one hand and with outcomes, i.e. labour market status and earnings, on the other hand. Only after one has controlled for observable individual characteristics and, additionally, for selection bias, can one see whether training participation has indeed increased re-employment probabilities. In the Polish case, this is left to later work.

Job brokerage

The raw data of the supplement also allow us to say something about the placement activities of labour offices. Of those in the August 1994 sample who entered into a new relationship with an employer 6.6% found their last job through a labour office. The majority found a job through personal contacts - i.e. through family and friends - (30.7%), through professional contacts (8.5%), through a direct application to the firm (18%) or through an announcement of an employer (8%). Thus, labour offices seem to be a marginal contributor to job brokerage in Poland as far as the national average is concerned.[29] With respect to the unemployed, only 8% were ever offered a job placement in the regular labour market. Of the offered job slots 47% were not taken up by the unemployed. That there are serious problems with the brokerage function of labour offices can be seen from the reasons given for not having taken up the offered job. More than a quarter of the job offers had already been filled when the applicants arrived at the firm (26%). In 14% of the cases the employer asked for qualifications which the applicant did not have, while in 13% of the cases the employer did not want to hire the applicant outright. The probably low quality of many of these job offers might be inferred from the fact that among those who took up the offered job but at the time of the interview had already terminated this work, 33% quit voluntarily.

3.2.3. Evaluation of Further Training and Re-training: Estimation of an augmented matching function

To evaluate Polish training measures econometrically an augmented hiring (matching) function is estimated using pooled times series cross section (voivodship-level) data. To this purpose several building blocks are needed (cf. Jackman and Haskel, 1988 and Lehmann, 1993b).

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[29]The employment offices set up by the trade unions have an even more dismal record. Only 0.2% of all jobs were brokered by these offices in our sample!

As hirings in the Polish administrative data only include unemployed persons flowing into regular, non-subsidised jobs, this variable is orthogonal to ALMPs like public works or wage subsidies. With participation in a public works or wage subsidy scheme an unemployed is automatically de-registered, i.e. flowing out of unemployment. Regressing these ALMP measures on hirings one might pick up some spill-over effects which occurr from ALMPs to regular hirings. One cannot, however, establish whether these ALMPs have improved the participants' ability to search for a regular job. The situation is different with the Polish Further Training and Re-training scheme. Participants of a Polish training measure receive an allowance which is slightly higher than benefit, they do stay on the unemployment register, though. Choosing the stock of training participants, lagged appropriately, as a regressor the question can be evaluated whether an increase in the stock of training participants has a positive net effect on the hirings of the unemployed. A positive net effect would mean that some of the unemployed through their participation in a training scheme have become more effective in their search for a regular job and that substitution of non-participants by participants in the hiring process is not a 100%.

To test whether the search effectiveness of some of the unemployed has been enhanced by being on a training scheme, the following augmented matching function is derived. Let c be an index of the search effectiveness of the unemployed in the absence of search enhancing labour market schemes which takes a value between 0 and 1. Let

$$\tau = c(1 + \alpha M), \; with$$
$$M = \sum_{i=1}^{i=n} \beta_i E_i, \text{ and } \sum_i \beta_i = 1 \quad (1).$$

M is here the weighted sum of search enhancing employment measures E_i (i=1,....,n), while τ is the search effectiveness index which is impacted by such labour market measures. In the case of Polish training measures α is assumed to be ≥ 0. Enhancing the search effectiveness of some of the unemployed and having a substitution effect which is less than 100% would imply a positive α. Let H be the number of unemployed being hired in regular, non-subsidised jobs, measured during a certain period, U and V the stock of registered unemployed and of notified vacancies respectively, both measured at the beginning of the period as are the search enhancing employment measures E_i. Then (τU) is the search effective stock

of the unemployed[30] and the augmented hiring function can be written down as follows:

$$H = f(V, \tau U), f_1, f_2 > 0. \quad (2)$$

A general Cobb-Douglas functional form is assumed as we do not want to impose any priors about the returns to scale properties of hiring functions in transition economies even though most of the evidence hints at decreasing returns to scale (cf. Boeri , 1994). Log-linearizing this last equation and adding a constant term we get

$$\ln H = \ln\gamma_0 + \gamma_1 \ln V + \gamma_2 \ln(\tau U) \quad (3)$$

For small values of αM the equation becomes[31]

$$\ln H \approx \delta_0 + \delta_1 \ln V + \delta_2 \ln U + \delta_2 \ln c + \delta_3 M, \text{ where } \delta_3 = \alpha\gamma_2. \quad (4)$$

In the Polish case we can only consider one search enhancing ALMP measure, Further Training and Re-training. From the supplement one can infer that the average length of a completed training spell for the unemployed is between 2 and 3 months. In the regression the stock of training participants, lagged one quarter, is taken as the training measure whose effectiveness on regular hirings is investigated. In principal then, Polish training measures can be evaluated by performing the following regression:

$$\ln H = \delta_0 + \delta_1 \ln V + \delta_2(\ln U + \ln c) + \delta_3 TR + \varepsilon \quad (5)$$

where TR is the stock of participants in Further Training and Re-training divided by 100 and ε is a white noise error term.

The duration structure of unemployment given by Polish administrative sources does not lend itself to the construction of the search effectiveness index c, as it was done for Britain e.g. in Layard et al. (1991) and in Lehmann (1993a). In order to find a

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[30]A detailed discussion of the concept of search effective unemployment can be found in Layard, Nickell and Jackman (1991). In order to be a meaningful concept τ must also take values between 0 and 1.

[31]Note that $\ln(\tau U)=\ln U+\ln\tau$. But $\ln\tau=\ln[c(1+\alpha M)]$. As for small x we have the rule $\ln(1+x)\approx x$, $\ln[c(1+\alpha M)] \approx \ln c + \alpha M$.

meaningful proxy for the search effectiveness index c, its function in an equation like (5) needs to be briefly discussed. Recall that c takes on values between 0 and 1, the lower this value the less efficient becomes the stock of unemployed in the matching process. Note that in equation (5) the lower c, the more is subtracted from ln U. The value of c in turn is a function of the duration structure of unemployment: the larger the proportions of longer duration categories in the unemployment pool the smaller is the value of c. Essentially one can think of the search effectiveness index c as an index which tracks the duration composition of the stock of unemployment over time.[32] A very simple way to track this composition over time is to split the pool of unemployed into short-term and long-term unemployed, i.e. unemployed with an uninterrupted duration of less and more than twelve months respectively. This can be done with the Polish data. The regression then becomes (for the precise derivation of this type of equation, see Boeri, 1994):

$$\ln H = \delta_0 + \delta_1 \ln V + \delta_2 \ln U_{ST} + \delta_3 \ln U_{LT} + \delta_4 TR + \delta_5 (\ln U_{ST} - \ln U_{LT})^2 + \varepsilon \qquad (6)$$

where U_{ST} and U_{LT} are the short-term and long-term stocks of unemployment.

Table 11 shows estimates of an augmented matching function using equation (6) for males and females jointly, covering six quarters form January 1993 to June 1994 and using pooled cross section time series data of the 49 voivodships. This regression has an exploratory character. Further work is required before safe conclusions can be drawn from this type of empirical evidence. Employing the Scarpetta-Huber taxonomy of Polish regions (cf. Góra and Lehmann, 1995) dummies are included to control for region-specific fixed effects[33] as well as time dummies to control for the time varying macroeconomic environment that is common to all voivodships. The coefficients on the dummies are not shown; however, while the region-specific fixed effects were not significant the time dummies were highly

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[32]The search effectiveness index c is constructed in the following way. Assume that there are D duration categories in the stock of registered unemployed. Let ϕ_d be the outflow rate of duration category d (d=1,....,D) in a certain steady state where, as observed in most OECD countries, $\phi_1 > \phi_2 > .... > \phi_D$ for all d (d=1,....,D), i.e. the shorter the duration category the larger the steady state outflow rate from unemployment. Also, let at the beginning of time interval t $w_{d,t} = U_{d,t} / U_t$ for all d (d=1,...,D) where $U_{d,t}$ is the stock of unemployment duration d and U_t is the total stock of unemployment. Then $c_t = \sum_d w_{d,t} \phi_d$ so that the search effectiveness index c_t can be indeed thought of an index which tracks the duration composition of the stock of unemployed over time.

[33]There are six types of Polish regions enumerated by Scarpetta and Huber: agricultural, developed; agricultural, others; heavily industrialized, developed; heavily industrialized, others; diversified, developed and diversified, others. By having dummies for the regional type rather than for each voivodship one reduces endogeneity problems which can arise from the fact that some voivodships respond to high unemployment (low hirings) by increasing the stocks of ALMP participants.

significant. Thus the stocks of unemployment and vacancies seem to capture most of the variation across voivodship types but not the variation over time.

Even though the regression is exploratory, the result has some credence as the coefficient estimates on vacancies, short-term and long-term unemployment are of the same order of magnitude as the estimates of Boeri (1994) who estimated a Polish matching function for the time period January 1992 to March 1993. The estimates imply that an increase in the number of short-term unemployed has a much larger effect on hirings than an increase in the number of long-term unemployed. Thus the two pools are not perfect substitutes in the matching process.[34] The strongly diverging elasticities also indicate that the previously presented estimates of job accession rates which were conditioned on duration of unemployment (cf. pp. 26-27) could be seriously biased. Like in OECD countries outflows from unemployment into employment seem to fall drammatically with duration of unemployment.

The most important result is the insignificance of the coefficient on the training variable. This result can be interpreted that after having ended a training course an unemployed person has not increased his/her effectiveness in search of a job, it can, however, also be interpreted that training participants among the unemployed have increased their search effectiveness but have, in the hiring process, then "crowded out" non-participants among the unemployed. While the results of this regression do not allow to discriminate between the two scenarios they do seem to imply that an increase in the (lagged) stock of training participants does not push up the flow from unemployment into regular employment. Whether Polish training courses have a too small element which enhances human capital or whether unemployed who have decisively enhanced their human capital just "jump the waiting queue" of those searching for a job[35] the overall net effect of Further Training and Re-Training on hirings seems to be zero.

The labour force survey evidence presented by Góra, Socha and Sztanderska (1995) on the relative magnitude of labour market transition probabilities of training participants cannot be sensibly used to check our result. They establish that the

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[34]This statement is equivalent to the introduction of the search effectiveness index c into the matching function. Because long-term unemployed are not perfect substitutes for short-term unemployed when it comes to hires the search effectiveness of the stock of unemployment falls as the proportion of long-term unemployed rises in the total stock. For a thorough discussion of the reasons why long-term unemployed are "worse" job searchers see e.g. Layard, Nickell and Jackman (1991).

[35]Of course, a combination of both is most likely.

unconditional job accession rates for training participants, although lower than those of the total pool of the unemployed, are higher than the rates for participants in other ALMPs. This just says that individuals targeted for ALMPs have a higher incidence of belonging to problem groups than individuals from the general pool of the unemployed. It also seems to say that those targeted for training measures are the best among ALMP participants. It does not say anything about the effectiveness of Polish training measures as the authors do not control for observable and unobservable characteristics.

3.3. The Czech Republic[36]

Unemployment in what is after the Velvet Revolution the Czech Republic (CR) has remained well below 5%. This unemployment rate is not only one of the lowest in the former communist countries, but also in the world. Many potential explanations of this phenomenon are discussed in the literature, but it has not yet been clearly determined what actually has kept unemployment so moderate in the CR. The explanation certainly lies in a combination of factors that are specific to the Czech economic situation before the beginning of the transformation process, and to the process of transformation itself. It is our aim to embed the analysis of Czech ALMPs into the general discussion of the performance of the Czech labour market.

Considering the flow approach to labour markets, the unemployment rate is a result of inflow into unemployment, outflow out of unemployment and outflow out of the labour force. The factors that explain these three flows also explain the level of unemployment. The following exposition of reasons for the low Czech unemployment rate is therefore structured around these three flows.

3.3.1 General macroeconomic performance in the Czech Republic

Before beginning with the description of the Czech labour market it should be noted that the general macroeconomic situation of the CR is relatively favourable. Many of the below quoted figures can be found in table 12.

The CR has had good initial conditions: it is a small, relatively open economy and, unlike Slovakia, Poland or Hungary, it has long common borders with Austria and Germany, two of the most advanced economies in the world. The level of net

[36]This section is partially based on preliminary results from the research project ***Czech Unemployment and German Labour Demand*** which the author is undertaking jointly with Donata Hoesch and Mark Schaffer.

external debt of the CR in 1990 was low to begin with (3.5 billion US Dollars in 1990, and 2.7 billion US Dollar in 1993) and has even fallen in 1993. In the same year the net debt-export ratio was 19 compared to 269 in Poland and 151 in Hungary.

At the end of 1990, at the outset of economic reforms, the Koruna was devalued sharply to increase the competitiveness of Czech products in world markets. Even if the gains in competitiveness were eroded by the middle of 1993, due to inflation and the nominal pegging of the Koruna to a basket of the US Dollar (35%) and the Deutsche Mark (65%) in May 1993, the current account remains positive (IMF, 1994). Exports have grown at double digit rates since 1990, and imports have also grown steadily. Like other Central European economies, the CR has managed to reorient its trade away from CMEA toward western markets, despite a real appreciation of the exchange rate. The single largest trading partner in imports and in exports is Germany with a share of more than 30% of total trade.

The CR has also been quite successful as far as the fight against inflation and the maintaining of a balanced budget are concerned. Inflation almost reached 60% in 1991, but has then been between 10 and 20%. The general government balance was positive at 1.4% of GDP. This suggests that since the beginning of the reforms the economy has been stabilised using restrictive monetary and fiscal policies.

Competitiveness of Czech products has also been enhanced by low real wages. Since the beginning of reforms wage growth has been restraint through a tax-based incomes policy, with a short interruption of wage regulations from January to July 1993 (IMF, op. cit., pp. 9 and 93). Real wages and real product wages have stayed low throughout the transition.

The favourable general macroeconomic situation affects the labour market in so far as the combination of relative stability and low labour costs attracts foreign capital and strengthens the demand for Czech goods and services, which may in turn also encourage private sector development. However, one might doubt whether low unemployment in the CR can be explained entirely by successful macroeconomic stabilisation policies as some Czech economists put forward (N.N., 1994).

3.3.2 The Czech labour market: inflow into unemployment from employment

According to Boeri (1994) average monthly inflow rate into unemployment in 1992 was 0.5% of the employed. This inflow rate is slightly lower than that of Slovakia

(0.8%) but in general in line with other CEE countries. All of these countries have relative low inflow rates by western European standards.

The slow pace of restructuring could be one explanation for the low Czech unemployment rate. It has been argued that the Czech state sector and former state sector are slow to restructure so that inefficient labour hoarding of a considerable amount is still taking place. Because the government and enterprise managers might want to avoid social conflict in order to protect their own future employment could be protected. This policy might not be too costly because unit labour costs are low due to weak trade unions combined with tight wage controls at the enterprise level and the devaluation of the Koruna. Hence labour hoarding can be financed without too much difficulty by selling stock and equipment, or by using funds earmarked initially for investment. On the other hand, it is argued that labour shedding could also be slower than expected, because large enterprises do not face a hard budget constraint yet. Substantial amounts of state subsidies, tax arrears and inter-enterprise trade credit help to postpone bankruptcies. In addition, it is argued that even after the first wave of privatisation small share holders and investment funds are not able to force management to restructure.

Two issues need to be addressed when discussing restructuring in the CR. First, it should be investigated whether restructuring and labour shedding is in fact as slow as often claimed. A contrary position is taken by Raiser (1994) who argues that restructuring in the CR has actually been quite substantial. Secondly, one should ask what can be considered an efficient speed of restructuring in the presence of the above mentioned market failures and government interventions.

When discussing the inefficiency of slow restructuring one should take account of theoretical arguments that support not too rapid labour shedding in certain circumstances. Aghion and Blanchard (1993) and Burda (1993) find that massive increases in unemployment due to rapid inflow can harm the transformation process, because high unemployment creates social costs that exceed the private costs of unemployment. If marginal social costs of unemployment are rising, for instance because during prolonged unemployment human capital depreciates or because high unemployment may hamper the development of the private sector due to resulting larger contributions and thus higher wage costs, it is not optimal to create a too large pool of unemployed.

Relative large subsidies to enterprises and inter-enterprise debt could be further explanations for low inflows into unemployment: Although subsidies to enterprises

are not directly intended as employment policies, their potentially positive effect on employment cannot be ignored. Even if it is impossible to assess how many jobs are exactly saved by these policies, it seems clear that as a consequence of such policies restructuring in the Czech Republic has not been as vibrant as it would have been in their absence. Large enterprises still seem to hoard labour as employment there has fallen by far less than industrial production and the average number of hours worked has declined more than employment in these firms in the years 1990 through 1993 (cf. table 12). Contributing to this are certainly low real wages as well as low real product wages in industry relative to Poland and Hungary for instance (cf. OECD, 1995). Nevertheless, enterprises in the Czech Republic are still marginally more subsidised by the government than in other leading transforming economies. Producer subsidies have amounted to almost 40 billion of Koruna each year since 1991, and for 1994 the same amount is projected. This is a share of GDP of between 4% to 5%, falling in real terms, however. In 1992, 3.2% of the Hungarian GDP and only 0.5% of the Polish GDP were spent on producer subsidies.

In the Czech Republic 35% of the producer subsidies are paid out in the transportation sector, 20% in agriculture and in foodstuffs. Also important are residential heating and mining with 14% respectively. So, producer subsidies are concentrated in a few sectors considered politically strategic by the government. However, in addition to subsidies, loans for environmental projects, infrastructure and export promotion guaranteed by the government have risen significantly from about 20 billion of Koruna at the end of 1992 to about 80 billions of Koruna in May 1994, even if only 10% of these guarantees are expected to be called on, which amounts to less than 1% of GDP. Moreover, distressed firms can usually negotiate tax arrears and thus be protected from illiquidity. Enterprises also protect each other from the hard budget constraint by using trade credits more extensively than elsewhere. In 1991, total receivables of the enterprise sector amounted to about 60% of GDP in the Czech Republic, whereas in Poland and Hungary they totalled only about 30% of GDP. All the above described policies soften the budget constraint of Czech enterprises, counteracting rather restrictive fiscal and monetary policies and leading to slower than expected restructuring of the economy. Thus inflow into unemployment is kept under control. Whether this is entirely unintentional is certainly questionable.

Another factor that keeps inflow into unemployment low may be considerable job to job flows in the CR. Workers may pass from the restructuring sector into the private growing sector without passing through a period of search unemployment, if the private sector is growing quickly (see discussion of private sector development

below). In 1991 for instance, 24% of laid off people found a new job without registering as unemployed. Moonlighting in the service sector, that existed extensively before transformation, may just be transformed into a legal or semi-legal small business, if the credit constraint is surmountable. If the new activity of a job leaver is illegal (e.g. working abroad), the worker may officially leave the labour force altogether (see discussion below).

A further factor which might explain smaller inflows into unemployment relative to other transition economies is the small share of agricultural employment in the Czech Republic at the beginning of the reforms. In transition economies unemployment rates are higher in rural than in urban areas. One explanation for this could be larger restructuring needs of the agricultural sector implying more labour shedding and larger inflows into unemployment in rural areas. Because of a relatively low share of agricultural employment the Czech Republic might then have lower inflows into unemployment than other transition economies (OECD, 1995).

3.3.3 The Czech labour market: outflow out of unemployment into employment

Also according to Boeri (1994) average monthly outflow rate out of unemployment in 1992 was 24.8%. That is the highest outflow rate in CEE countries. By western European standards this is also a high outflow rate.

It is generally believed that the private sector in the CR is more dynamic than in other CEE countries and that it its activity is underestimated by the official statistics (Ham et al., 1993 and Benacek, 1994). In almost all transforming economies in the region demand for services was unsatisfied or satisfied by moonlighting, so that the opportunities for small enterprises in this sector are ample. But most probably potential entrepreneurs in all CEE have considerable difficulties to acquire the capital necessary for a start. In the CR, however, real wages are relatively low, which contributes to private sector development. First it makes any kind of enterprise less costly and thus lowers the barrier to entry due to lack of capital. It also makes tourism, a sector booming tremendously in the CR, even more attractive. Secondly, it attracts foreign firms to set up new enterprises in the CR or to subcontract with Czech firms. Thirdly, low wages turn to be privatised firms into more lucrative deals, while too high real producer wages might cause the net present value of many to be privatised firms to be negative (cf. Akerlof et al., 1991). Another, more general reason for the more dynamic private sector growth in the

Czech Republic could be the higher state of urbanisation which the above mentioned low share of agricultural employment implies.

One explanation of relative large outflows from unemployment into employment thus far not much studied is the closeness of the Bavarian and Austrian economies which might boost private firm formation on Czech territory through demand for relatively skilled, but low cost labour. It might be worthwhile to investigate whether subcontracted and home production for the Bavarian and Austrian markets has boosted private firm formation in border regions.[37] Table 13 shows the stock of small private firms by region in April 1994 and the regional unemployment rates of September 1994. The regions "Austria", "Bavaria" and "EX-GDR" are the districts in the CR bordering at these regions. From the static figures in table 13 we cannot make out a larger incidence of private entrepreneurs in the regions bordering at Austria and Bavaria. The statistic "Frequency/regional LF" is uniform across all regions with the exception of Prague where it is higher by 46%. The much lower unemployment rate in the region bordering at Bavaria does not seem to be caused by flows into small production on Czech territory as we surmised. Svejnar, Terrell and Münich (1995) estimate a model of the determination of outflows from unemployment for the Czech Republic. Their results lend some support to our conclusion: their measure of geographic proximity to Bavaria, the log of the distance to the Czech-German border has no predictive power with respect to outflows from unemployment.[38]

We now come to labour market policies. The initial unemployment benefit scheme set up January 1990 was relatively generous to the unemployed in terms of compensation, eligibility as well as in terms of duration. In January 1992 a more restrictive scheme was introduced in order to cut costs and to create more incentives for job search. The maximum period during which an unemployed may receive benefits was shortened to six month instead of one year. The benefit is 60% of net average income in the last quarter of employment for the first three months, 50% for the next 3 months. The minimum benefit is the subsistence level set by law, the ceiling is set at 3000 koruna. Eligible are only individuals who have either worked,

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[37]In transition economies it might not be very sensible to look at purely spatial closeness in order to make out a link between Western product demand and production in transition economies. The infrastructure in such countries is very underdeveloped and a location further away from the border but closer to a main highway (Autobahn) might be a more favourable location as far as transportation costs for Western firms are concerned.

[38]Of course, inflows into small production need not have unemployment as their origin state but can also originate from employment, their results support our conclusion, therefore, only partially.

studied or taken care of a child under three years of age for 12 months during the previous three years.

After the introduction of this new benefit scheme the ratio of benefit receivers to all unemployed fell from 72% to 58% in January and to about 35% in the first half of 1993. The unemployment rate fell gradually from 4.4% in January 1992 to below 3%, but since August 1993 it has been constantly above 3%.

Active labour market policies were introduced in June 1991 in the Czech and Slovak Republics. They are administered by the district employment offices, implying that they have considerable discretion over the amounts to allocate to active labour market policies as a share of total spending and over how to implement the different programmes (in 1994 jan-sept active labour market polices shares of total spending ranged from 6,3% to 46,7% in the different districts and averaged 24,8%).

Since 1991 unemployment has been considerably reduced by active employment measures in the Czech Republic. In 1991 the number of people who found employment through such a measure amounted on average to a share of 48% of the unemployed, when unemployment reached its highest level so far of over 4%. In the following year after the tightening of unemployment benefits in January 1992, the share was up to 77%, but unemployment dropped back below 3%. In 1993 and the number of people employed through active labour market policies was reduced to less than a third of its 1992 level or 28% of unemployment. In 1994 the share of active labour market policies has been markedly reduced so far, even though unemployment is picking up again. The share of employment through active labour market policies to unemployment was 15% on average from January to September 1994.

Under the assumption that entry into an ALMP scheme implies a one-for-one outflow from the unemployment register the unemployment rate in the Czech Republic would have been 1.5-2% points higher in 1991 and 1992; in 1993 and 1994 these employment policies reduced directly the unemployment rate by, however, less than 1% point with a decreasing tendency. Looking at the net effect of ALMPs (taking into consideration substitution effects and dead weight loss) the differentials in the unemployment rate implied by these policies should be, however, smaller.

In 1991 and in 1992 emphasis was put on long-term employment creation policies called "Socially Purposeful Jobs (SPJ)". The created jobs in this scheme were a major source of outflow out of unemployment (SPJs accounted for 35% of

unemployment in 1991 and 50% in 1992). Their impact has been considerably reduced in 1993 and 1994 to less than 10% of unemployment. From 1991 until 1993 less than one third of subsidised employment were short-term public work measures called "Publicly Useful Jobs (PUJ)", but in 1994 44% of all employment measures were PUJs. In 1993 the two measures were equal in importance, both considerably reduced to about 12,000 jobs, and during the first 9 month of 1994 there were on average even less SPJs than PUJs. "Retraining" and "Practice for Young People" are two additional measures that only picked up momentum in 1992 and 1993 respectively. In 1993 they both were of roughly the same magnitude as PUJs, but in the first half of 1994 they amounted together for only half the number of PUJs. The "Practice for Young People" policy has grown in importance, however.

Total spending on unemployment reached its peak in 1992 with more than 3 billion of Koruna or 0.4% of GDP, although more restrictive benefits regulations were introduced at the beginning of that year. Expenses in 1993 total spending fell back to approximately the 1992 level of more than 2 billion of Koruna or 0.3% of GDP. In 1994 so far, absolute spending is in the same range, even if it will probably reach a share of GDP of about 0,4%. Expenses on active labour market policies accounted for more than 50% of total spending only in 1992. Before and after that spending on active labour market policies has been about one third of total spending, apparently falling to a quarter in 1994.

ALMPs as implemented in the CR can have distortive and positive effects. On one hand, there is a risk of dead weight loss, especially with SPJ that tend to be given to individuals, who are well qualified. Possibly they might have found a job anyhow, and the subsidised job would have been created even without the subsidy. On the other hand, in a transforming economy with capital markets only emerging and an initial lack of entrepreneurial skill subsidising job creation for well qualified individuals may help in enterprise formation; for instance, such subsidisation may allow a new firm to access the capital market with the guarantee of the employment office. If subsidised jobs support the development of the private sector that would not have taken place otherwise due to market imperfections, a SPJ or retraining scheme or trainee programme may trigger further job creations and thus can lead to more than just the direct effect of keeping an unemployed off the dole for a certain period of time.

The estimation of augmented matching functions produces, in principal, the net effect of ALMPs on outflows from unemployment. Burda and Lubyova (1995) estimate functions similar to equation (5) in section 3.2.3 for the Czech and Slovak

Republics using district level data. For the Czech Republic, their variables capturing regional ALMP activity are potential stocks of PUJ and SPJ or total district expenditures on ALMP. The available data on ALMP participants are in the form of "agreements" concluded with municipalities or private employers and are, therefore, clearly an upper bound of the actual stocks.

According to their results, in the Czech regressions ALMP participation stocks are not statistically significant predictors of outflows from unemployment into employment while total district spending on ALMP are statistically significant in all specifications. The imputed long-run elasticity of spending with respect to outflows, 0.068 means that if in the Czech Republic spending had not fallen from 1992 to 1993 by 56%, outflows from unemployment would have been raised by 12.4% implying a decrease in the steady state rate of unemployment from 3.3% to 3%. Their econometric evidence confirms the previous supposition about the marginal influence of ALMPs on the Czech labour market as it points to a discernible but small effect of ALMPs on the Czech unemployment rate.

Regional labour mobility might also contribute to outflows from unemployment. High regional labour mobility can offset regional differences in unemployment and vacancies, as job applicants move (migrate or commute) from regions with high unemployment to vacancy ratios (low wages) to regions with less tight labour market conditions (high wage). As a result regional matching according to skill demand and supply is improved, even if firms and capital are slow to move. Better factor allocation leads to lower regional unemployment dispersion, but also to lower overall unemployment due to more efficient use of available resources. According to Erbenova (1995) regional disparities in unemployment, vacancies and wage have increased in the last four years. The eastern half of the CR has almost entirely unemployment rates above 3 and often above 5%, whereas the west of the country, especially that part which borders at Germany has distinctly lower regional unemployment rates. Vacancies follow a reversed pattern. Regional wage variations have increased since the beginning of transformation, while regional net migration flows are small.

Prague has a net inflow of people, which is conform with the fact that unemployment is extremely low there and the private sector is booming. Commuting, which was considerable even before transformation, has increased further and in 1991 about 30% of the labour force commuted to work, mainly short distances. Because of the limits of the housing market, commuting seems to be preferred to migration. People

commute to regions of low unemployment and relatively high wages. In the CR labour mobility goes into the direction which is predicted by theory.

3.3.4 The Czech labour market: outflow out of the labour force

Workers may leave the labour force either directly from employment or after a period of unemployment. In the CR immediately after the beginning of the reform policies large numbers of pensioners and women left the labour force. Czech women at any rate have the left the labour force in larger numbers than in other transition economies where women have preferred to remain in the state of unemployment (cf. IMF, op. cit and Ham et al., op. cit.). This labour force withdrawal of large numbers of pensioners and women has certainly in the short run softened the unemployment problem in the CR. What is, however, more interesting is the temporary labour force exit of generally young and relatively well skilled persons who have chosen to work in Germany and Austria.[39] These persons might relieve pressure on the Czech labour market in the medium run since, if they chose to work at home, they might very likely "crowd out" of employment persons who are now at work but have "worse characteristics" than the temporary "emigrants".

According to informal estimates of German and Czechs officials Germany there is about one illegal Czech worker per legal Czech worker and there are altogether about 100.000 Czech who work abroad. In 1993 there were about 34 thousand Legally employed Czechs in Germany, of whom 70% worked in Bavaria and 40% in the Bavarian Border Regions (cf. table 14). What should be looked at is the development after 1990 as Czech workers in 1990 were mainly emigrees who had worked in Germany for a long time. The dynamics for the years 1991-1993, while impressive, are not that substantial to have caused a major reduction in the Czech unemployment rate. The 40% working in Bavarian Border regions are mainly persons residing close to the border who are allowed to work there permanently as long as the local Bavarian labour market situation makes this possible. With the onset of the recession in Germany in 1993 new hirings of such cross border commuters declined somewhat as table 14 shows. While the numbers of cross border commuters is not large relative to the Czech labour force one should note, though, that the CR is the only transition economy bordering at a Western country and having secured such a generous agreement on in principal limitless crossborder commuting. The impulse the commuters give to the local economy on the Czech

[39] Svejnar, Terrell and Münich (1995) provide some evidence of significantly lower inflows into unemployment in border regions.

side should also not be neglected. To the number of Czech persons working in Germany need also to be added workers who are employed by a Czech firm that subcontracts with a German firm (Werkvertraege). Such persons are counted as employed in the CR. While in 1992 this number was quite large, it fell to under a thousand in 1993 (cf. table 14).
The number of legal Czech workers in Austria is with approximately 4 000 much smaller (Erbenova, op. cit.). If one, however, assumes that those working abroad would with a factor of 0.5 "crowd out" persons thus far employed, in that case one would need to add 50, 000 to the stock of unemployed which would raise the unemployment in e.g. 1993 by 0.6 percentage points.

As the last calculation shows individual determinants of a relatively low unemployment rate are not necessarily impressive, however the sum of all factors which possibly have, aside from ALMPs, an influence on the low Czech unemployment rate is surely more important than the tools used by Czech employment offices in their fight against unemployment.

V Are there Lessons for the Russian Federation?

The large negative shocks to output which have occurred in all member states of the CIS have resulted in uniformly low levels of registered unemployment. The underemployment of labour has expressed itself in a different manner than in Central Europe. Firms have thus far not shed labour in a massive way but have "convinced" workers to work short-time, to go on involuntary extended leave or to work without pay for long periods of time. On the one hand, workers find these arrangements psychologically advantageous as they speculate on a return to normal hours of employment at regular pay sometime in the future. As many workers have secondary employment in the informal sector and as eligibility criteria for unemployment benefits are tough and these benefits in turn minimal there are also hardly any economic incentives for workers to register officially as unemployed. While the above said is generally true for all states of the CIS, labour market performance varies widely. As there exists empirical analysis of the Russian labour market which is unparalleled in its detailed data analysis in other CIS states, events in the Russian Federation will be briefly presented. They can serve only as a limited basis for the assessment of ALMP implications in the CIS since the Russian labour market seems much more "dynamic" than labour markets in other CIS states.

Although there are some measurement problems as far as labour market (in)activity in Russia is concerned (Commander and Yemtsov, 1995) the following facts can be presented with some confidence:

- Registered unemployment has been very small compared to virtually all transition economies in Central Europe (about 2 percent in mid-1994), but even unemployment data using household surveys indicate a true rate of only 5-6% (Centre for Economic Analysis, 1994).

- Unlike in all other transition economies, registered unemployment has thus far not been a stagnant pool but rather dynamic: with low inflow rates, outflow rates from registered unemployment into regular employment have been large and comparable to the rates in the Czech Republic and in OECD countries while the average duration of unemployment has been short .

- The majority of separations in 1992 and 1993 has been voluntary quits while employment reductions were only the second most important reason for separations (Commander, McHale and Yemtsov, 1995).

- A substantial part of the workforce in Russian industry remains in their primary jobs on extended leave. While primary employment of these persons is mainly in the state sector many of them have secondary employment in the private or semi-private sector. Often the latter employment has short working hours, is higher paid but also more risky than employment in the state sector.

- There is a strong bias in (un)employment legislation against registering as unemployed. For example, persons who received severance pay in the years 1992 and 1993 were not eligible for unemployment benefits and had, therefore, no incentive to register. Also, the probability of receiving benefits when registering is very low, so again there is no incentive to apply to an Employment Centre (EC). Furthermore, especially in rural areas distances to EC's can be considerable, clearly discouraging the unemployed to register. Finally, as EC's have a very poor reputation with firm managers, the former do not offer efficient job brokerage services to the unemployed (cf. Standing and Chetvernina, 1994)

- With very low rates of registered unemployment in the early phase of transition the share of women unemployment has been disproportionally high (about 70%). Analysis of registered unemployment rates at the regional level by Commander, McHale and Yemtsov (1995) show, however, an inverse relationship between

unemployment rates and women's unemployment shares. For the future, when registered unemployment is expected to rise substantially this would imply that women's unemployment share should approach their share of the labour force. Whether one can detect in household survey data for 1992 and 1993 problem groups will be briefly discussed below.

- Even with strongly downward biased registered unemployment and notified vacancies regional divergence in U/V ratios is impressive. For example, in the Central Region (Central'nyj Rajon) the City of Moscow has had throughout the transition period a U/V ratio of well below one while the district of Ivanov (Ivanovskaja Oblast') had a U/V ratio of 15 in June 1993, reaching the value of 75 in June 1994 (Centre for Economic Analysis, 1994). The overall figures certainly hide this kind of regional mismatch!

- The same data also show an inverse relationship between the U/V ratio of an oblast' and the distance to Moscow. As official employment has substantially contracted in Moscow low U/V ratios in Moscow and surroundings seem to indicate that in agglomeration centres like Moscow the shadow economy provides substantial employment opportunities not captured by official data.

- At least until the middle of 1994, unemployed flowing back into employment had as their largest destination the state sector. Firms in the state sector seem to have increased on average their level of labour hoarding made possible by subsidies provided by the central budget. Commander et al. (1995) show why given a certain technology firms might in the light of negative output shocks prefer to increase labour hoarding instead of choosing employment reductions via attrition.

While these presented facts have been established looking mainly at aggregate data additional insights about labour market experiences of various groups have been gained by analysing household survey data. The following discussion is based on Foley's (1995) estimates of annual transitions between 1992 and 1993. It neglects the issue of round-tripping which should be kept in mind especially for unemployment transitions given their magnitude in the Russian labour market during the reported period

Comparing gross transition probabilities between the three states of the Russian labour market with those of eastern Germany during the first phase of transition (Bellmann et al., 1995) and Poland (Góra and Lehmann, 1995), some interesting patterns can be seen. The probability of remaining in employment is clearly greater

in Russia (91%) than in eastern Germany (84%) or in Poland (88%). Also job accession rates are larger in Russia (60%) than in the other two transition economies (54% and 46% respectively). Over the year nearly two thirds of the Russian unemployed leave the unemployment stock. Whilst for Poland this number is only 52%, eastern Germany has comparable large annual outflows from unemployment. However, in the latter case the outflows are nearly evenly divided between job accessions and labour force withdrawal (35% and 27%). The large majority of Russian outflows consists instead of job accessions (51%), with only 16% withdrawing from the labour force. Finally, the inflow rate into unemployment is marginally lower than in Poland (3.3% cf. to 4%) and a lot lower than in eastern Germany (9.3%) where after monetary and social union SOE's relentlessly shed labour. The interesting point coming out of these comparisons is that, unlike in Poland, unemployment in Russia is not a stagnant pool but has a rather dynamic nature. This is derived above all from large outflows out of unemployment while inflows are comparable to transition economies in Central Europe which in turn have relatively low inflow rates (Boeri, 1994). In Central Europe, persons, once flown into unemployment, have on average great difficulties leaving this state while Russian unemployed, on the LFS measure, do not share this experience during the reported period.[40]

While the usual demographic patterns of gross transition probabilities can be observed in the Russian sample (e.g. larger labour force withdrawal rates for older workers) very strong patterns by demographic characteristics (gender, age and education) which allow the identification of problem groups cannot be made out for the reported period. Foley's disaggregation of employment into the set {state enterprise, private enterprise, work collective, otherwise owned, self-employment} shows why this is so: the labour market experience of various demographic groups is in fact sector-specific. While women, older persons and the less educated have essentially better prospects in state enterprises, men, younger persons and the more educated fare better in the private sector and self-employment. As state enterprises stop labour hoarding and commence employment reductions in earnest, it is likely that also in Russia a person with one or more of the characteristics of the first group mentioned will experience a deteriorating labour market experience. The thus far analysed data do show a very different behaviour of state owned firms with a strong element of labour hoarding which seems to help those groups which in other transition economies bear the brunt of the restructuring effort.

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[40] Note that Commander and Yemtsov come to a similar assessment, using aggregate data, for a period well into 1994.

From the case study by Nemova and Lippolt (1995) of Russian Federal Employment Services (FES) it is known that many of the tools to combat unemployment used in the cited transition economies of Central Europe have also been employed in the Russian Federation. However, the net effects of the application of e.g. training schemes and public works cannot be inferred from their study[41]. Also, their study does not embed the discussion of ALMPs into the above presented context of the Russian labour market. Combining the presented stylised facts of the Russian labour market with the evidence on the effects of ALMPs in Central Europe one can draw some general, very tentative lessons for policy makers in the Russian Federation.

From the discussion on the age structure of Polish unemployment it should be clear that it is a rather complex undertaking to identify problem groups with certainty. Participation rates of such groups need to be analysed and compared to economies with similar development and age structure. Relatively low participation rates, especially of the young, might hint at greater opportunities in the rather large shadow economy than in the formal sector. As a counterweighing argument, Russian employment legislation is rather restrictive in its recognition of benefit entitlement and, given often high transportation costs, might produce a strong downward bias for the groups who are especially vulnerable. One of the major tasks of the FES at this point in time, i.e. before registered unemployment will reach levels of other transition economies, should be to promote employment legislation and to develop an infrastructure which both allow the identification of the true problem groups among the unemployed.

With continuous labour hoarding in state enterprises, wage subsidy programmes seem an absurd variant of ALMPs which always should be considered flanking measures for the economic transformation towards a market economy. Given the political structures at the local and regional level, it seems rather an illusion to try to restrict such subsidies to de novo private firms which could be targeted without retarding the restructuring efforts of policy makers.

The stylised facts, presented above, point, at least for the reported period (beginning of reform programme to the middle of 1994), to a differently performing labour market than in e.g. Hungary and Poland. Overall outflow from unemployment, using the LFS measure, is much higher and problem groups cannot be made out, at least if one uses as an identifier the outflow rate from unemployment. Nevertheless, there

[41] Unfortunately,they do not discuss possible distortive effects of the various labour market programmes.

are possible lessons from the experience of Central European countries as the "dynamic" overall performance of the Russian labour market seems misleading in two respects. First, even now the overall figures disguise the huge regional variations in U/V ratios. There clearly are already areas where labour demand is low and where the unemployed have difficulties flowing out of unemployment. In such regions (i.e. oblasts) it is important for ECs to study whether there are already problem groups similar to those identified in other transition economies by comparing the outflow rates of specific groups. Secondly, as large firms (state owned or privatised) start to shed labour in earnest the pool of the unemployed should rise to levels which will be comparable to other transition economies. In that case it is inconceivable that the outflow rates from unemployment, thus far observed, can be maintained and one should expect bad labour market experiences for certain groups similar to countries in Central Europe. Thus the labour market situation in other transition economies already pertains in certain Russian regions already now and will pertain for most Russian regions in the near future. There will be strong competition among the unemployed about the rather scarce jobs and opportunities in the de novo private sector and the shadow economy will not be large enough to absorb such a portion of the pool of the unemployed which would guarantee small stocks of unemployment and short durations. Therefore, labour market policies can be discussed using their assessment in Central European countries even if now the labour market performance in Russia seems very different.

Most transition economies in Central Europe (CE) have used a wide menu of ALMPs to combat unemployment. However, because of budgetary constraints, but also because of the crowding out of active measures by the increasing needs for income maintenance expenditures on ALMPs have for the most part only been a small fraction of total labour market expenditures. This is one reason why ALMPs have hardly affected the overall unemployment rate in these countries. The Czech example showed, on the other hand, that even where the share of expenditures on ALMPs is high a bundle of factors determines the low unemployment rate among which ALMP has not been identified as the most important one. In the CIS one often meets with the naive expectation that large ALMP measures will successfully reduce the unemployment rate. One of the tasks of Russian policy makers should consist in explaining to the population that such policies can only have marginal effects in the labour market. It will be equally important to resist the temptation to offer (on paper, as it is done in most transition economies) a wide menu of ALMPs and to instead concentrate on one or two policies most appropriate for the region in question.

The experience in Central European Countries leads one to conclude that it is difficult to design from scratch ALMPs in such a way that they minimise distortive effects. Normally, a long learning process is needed to remedy the deficiencies in the (un)employment legislation which generate distortions. In Russia, given the extreme budget problems of local authorities the danger of fiscal substitution effects of public employment programmes seems especially great and it is essential to devise these programmes accordingly.

When targeting ALMPs one should have a clear idea what one wants to achieve, whether one wants to increase efficiency or equity. Most programmes in CE targeted at problem groups, like the long-term unemployed, the older and the less educated workers, do not seem to generate efficiency gains. Taking retraining and public employment schemes as an example, if they are targeted at problem groups they do not seem to increase the average probability of re-employment of persons belonging to these groups. Poorly educated unemployed workers, even after a retraining measure have to compete with a large pool of unemployed with "better characteristics" and with people still employed in declining sectors. Participants of public employment schemes are often, like in OECD countries, stigmatised as low productivity workers, consequently participation in such schemes in fact reduces re-employment probabilities. It seems sensible, though, to use public employment programmes for equity reasons when targeting the long-term unemployed for example. Such persons have experienced long periods of reduced income and should on equity grounds have the opportunity to temporarily gain a relatively high income. Retraining measures, on the other hand, must generate some efficiency gains if they are to be employed. If targeted at problem groups, careful vetting is necessary to select only those with intrinsic ability, with flexibility and drive. Such careful vetting imposes, however, great demands on the staff at ECs which, given the staff/client ratio in most transition economies, cannot be met. In order to ensure some efficiency gains Russian ECs should develop clear ideas about which groups to target for retraining measures before introducing such measures on a large scale.

Measures to promote self-employment should definitely be stressed as there are some positive experiences with such measures in the Czech Republic and in Poland. As the financial infrastructure is certainly not better in the Russian Federation the arguments previously made in the Czech example for the granting of loans to carefully vetted participants also hold.

One type of programme that has been thus far ignored in transition economies is a programme like the British Restart Programme which advises unemployed persons with

spells longer than six months about their possibilities in the labour market. As registered unemployment will rise in Russia, so will long-term unemployment. Rather than be too ambitious with the more conventional programmes, like retraining and public employment, Russian ECs should first develop a good infrastructure of consulting services for all the unemployed and especially for problem groups among the unemployed like e.g. the long-term unemployed. This would not only improve the matching process but would also go a long way to improve the poor image which government run ECs have among Russian workers (Standing and Chetvernina, op. cit.).

VI Conclusions

Transition economies have introduced a wide range of OECD ALMPs to combat unemployment. Many of these measures are, however, rather on paper than employed in any substantial way in practice since with the rise of the stock of unemployment in most transition economies to levels comparable with OECD countries, passive measures have crowded out ALMPs. But even where this was not the case, like in the Czech Republic, ALMPs have only marginally contributed to the lowering of the unemployment rate. Having looked at various determinants contributing to the extremely low unemployment rate in the Czech Republic, in comparison with other transition economies and with OECD countries, the conclusion was reached that ALMPs explained only a small fraction of this unemployment rate differential. To remove misperceptions by the public, one important task of policy makers in CEE has to be to bring across the message that even under the best circumstances ALMPs can only play a marginal role in bringing down the unemployment rate.

Despite their marginal role, ALMPs can be useful also in transition economies. However, the situation in CEE labour markets is different from that in OECD countries which prohibits a mechanical application of OECD ALMPs to these labour markets. Because of severe and persistent shortages in capital and managerial ability labour demand is and will stay in the medium term weak while labour supply, among others for demographic reasons, will be abundant. Consequently, labour shed in those enterprises which restructure or are liquidated cannot be absorbed in its entirety by the expanding private sector which leads to unemployment also affecting core groups of employment and to more competition among the unemployed than this is the case in OECD countries. Certain problem groups which were identified in the Hungarian and Polish case as those who are older and less educated seem to have very poor prospects for future employment. In these two countries, also women have lower probabilities of regaining employment than men.

Because problem groups have to compete for jobs in the expanding private sector with many unemployed from core groups of employment and with persons who are still employed in the state sector, the usual rationale for targeting retraining and public employment measures at problem groups, i.e. to integrate them into the effective labour supply, has to be questioned in transition economies. If e.g. one targets retraining measures at those with vocational training who have both in Hungary and Poland a high incidence of unemployment it is in no way clear whether this will on average increase their re-employment probabilities as they have to compete with many people with much better educational backgrounds who are in addition probably perceived as more productive by prospective employers. Alternatively to targeting retraining measures at all members of problem groups one could carefully vet these groups for flexibility, intrinsic ability and drive and choose only people with such characteristics for such measures. O'Leary's (1994) Hungarian results seem to suggest that people with these characteristics from problem groups benefit most from being taken on a retraining programme. Given the very low staff/client ratios in most CEE countries the realisation of this alternative on a large scale seems, however, not very feasible. Because of the very scarce resources for ALMPs it might be more sensible to use the funds for retraining to solve various skill bottlenecks by targeting the most able among the unemployed.

Public employment programmes should above all be targeted at problem groups and the long-term unemployed.[42] This should be done mainly for equity rather than efficiency reasons. Since persons through participation in a public works scheme do on average not improve their re-employment probability or in actual fact might lower this probability because of signalling problems and the value added from public employment programmes are most likely small, efficiency gains cannot be great. Nevertheless, it is certainly more equitable to temporarily allow groups access to relative high income who have suffered disproportionately from income losses. The main point is to have a clear idea whether both efficiency or equity aims *can* be pursued and if efficiency gains are unrealistic whether equity considerations are politically indispensable.

One programme of ALMPs which has been used only rarely promotes self-employment. Given embryonic financial structures risk assessment cannot be done extensively by the private banking sector such that those among the unemployed who want to create their own businesses will experience severe credit rationing. Employment Offices through granting start-up loans can contribute to the removal of

[42]Assuming some heterogeneity among the unemployed and efficient sorting many of the long-term unemployed belong to one of the problem groups. With very low outflow rates from unemployment, many of the long-term unemployed do not belong to a problem group, but are just the unlucky ones.

this distortion arising from credit rationing. The empirical evidence cited from the Czech Republic and from Poland hinted at the effectiveness of such programmes. As services in the untradables sector are underdeveloped in most transition economies displacement of output effects which are prominent in OECD countries with self-employment schemes should be small.

Employment Offices in Hungary, Poland and Russia have a very poor record as far as job brokerage is concerned. Empirical evidence in Poland and Russia pointed also to large informational deficits among the unemployed. One aim that should be vigorously pursued before a wide menu of ALMPs is tried out is the improvement of the consulting services for the unemployed. In this context increasing the consulting efforts for problem groups seems especially worthy. For example, along the lines of a programme like Restart the longer-term unemployed[43] should be interviewed and given advice about possible job openings and eligibility criteria for state funded employment activities. Putting consultative programmes at the centre of ALMPs rather than fall into some "wild activism" which tries to apply a wide menu of OECD ALMPs would be a more modest but also a more realistic effort.

The labour market in the Russian Federation has for the reported period (1992-1994) been much more "dynamic" than the typical labour market in transition economies (e.g. Hungary and Poland) and in its performance, i.e. low unemployment incidence and large outflows from unemployment for virtually all groups, been much closer to the only low unemployment labour market of CE (the Czech labour market). The reasons for this performance are, however, very different from the Czech case. One of the central reasons has been continued massive labour hoarding on the part of Russian enterprises. One would expect Russia to reach unemployment levels which are more typical for transition economies, once enterprises begin to shed labour in earnest. In future, the policy conclusions concerning ALMPs should, therefore, not be very different from those presented for the other transition economies.

[43] Since unemployment benefits are in most transition economies cut off after 12 months and many persons are deregistered after the cut off point it seems sensible, as it is done in Britain, to invite the unemployed to an interview after six months of unemployment.

Table 1

Public Expenditure and Participant Inflows in Labour Market Programmes (%)
Hungary

Programme categories	1992 Total expenditure as % of GDP	1993 Total expenditure as % of GDP	1992 Participant inflows as % of lab. force	1993 Participant inflows as % of lab. force
1. Public employment services and administration	0.15	0.16		
2. Labour market training	0.15	0.24	0.95	1.42
a) Training for unemployed adults and those at risk	0.15	0.24	0.95	1.42
b) Training for employed adults				
3. Youth measures				
a) Measures for unemployed and disadvantaged youth				
b) Support of apprenticeship and related forms of general youth training				
4. Subsidised employment	0.33	0.30	2.89	2.64
a) Subsidies to regular employment in private sector	0.15	0.11	1.89	0.94
b) Support of unemployed persons starting enterprises	0.08	0.05	0.60	0.72
c) Direct job creation (public or non-profit)	0.10	0.14	0.39	0.99
5. Measures for the disabled				
a) Vocational rehabilitation				
b) Work for the disabled				
6. Unemployment compensation	2.26	2.14		
7. Early retirement for labour market reasons	0.06	0.11		
TOTAL	2.95	2.96	3.83	4.06
- Active measures (1-5)	0.64	0.70	3.83	4.06
- "Mobilising labour market supply" (2a, 3a, 4a-b, 5a)	0.38	0.40	3.44	3.07
- "Non-targeted training" (2b, 3b)	0.00	0.00	0.00	0.00
- "Work as a social objective" (4c, 5b)	0.10	0.14	0.39	0.99
- Passive measures (6-7)	2.32	2.26	0.00	0.00

Source: Labour Ministry, Budapest, Hungary

Table 2

Public Expenditure and Participant Inflows in Labour Market Programmes (%)
Czech Republic

Programme categories	1991 A	1992 A	1993 A	1991 B	1992 B	1993 B
1. Public employment services and administration	0.08	0.10	0.11			
2. Labour market training	0.01	0.01	0.01	0.10	0.34	0.20
3. Work experience for school leavers	0.01	0.05	0.03	0.27	0.42	0.14
4. Subsidised employment	0.08	0.16	0.05	0.89	2.27	0.47
a) Subsidies to regular employment in private sector	0.05	0.10	0.02	0.40	1.22	0.16
b) Support of unemployed persons starting enterprises	0.02	0.03	0.01	0.22	0.50	0.08
c) Direct job creation (public or non-profit)	0.01	0.03	0.02	0.27	0.55	0.23
5. Supported work for the disabled	..	0.01	0.01		0.03	0.02
6. Unemployment compensation	0.23	0.20	0.16			
TOTAL	0.41	0.53	0.36	1.26	3.05	0.83

A Total expenditure as percent of GDP
B Participant inflows as percent of labour force

Source: OECD

Table 3

Labour Market Expenditure as Percentage of GDP
Poland

	1990	1991	1992	1993
Labour fund/GDP (%)	0.63	1.65	2.00	2.01
Labour fund/GDP (%)-adjusted	0.54	1.50	1.84	1.93
PLMP/GDP (%)	0.32	1.35	1.72	1.68
ALMP/GDP (%)	0.29	0.26	0.25	0.31
ALMP/GDP (%)-adjusted	0.20	0.11	0.09	0.23

Source: Góra (1995) and own calculations.

Table 4

Expenditure on Labour Market Programmes (Nominal; Billions PLZ)
Poland

	1990	1991	1992	1993
Training/retraining	16.0	90.0	192.9	449.5
Intervention works	209.0	453.0	468.8	1366.3
Public works	--*	--*	174.2	1196.9
Start-up loans	962.0	404.0	237.5	532.6
Apprenticeship	504.0	1213.0	1789.0	1321.7

* Public Works started in 1992.

Source: Góra (1995).

Table 5

Number of People on Various Labour Market Schemes
Poland

No. of people on schemes ('000)	1990	1991	1992	1993
Training/retraining	10.3	68.1	70.2	72.7
Intervention works	106.9	36.0	104.5	132.7
Public works	--*	--*	35.5	74.1
Sum of people on schemes	117.2	104.1	210.2	279.5
Share of scheme participants in total unemployment (%)	20.3	6.4	9.0	10.3
Apprenticeship	x	x	400.0	320.0
Start-up loans	x	x	9.8	11.7

* Public Works started in 1992.
x comparable data are not fully reliable.

Source: Góra (1995).

Table 6

Participation Rates, Unemployment Rates, Long-term Unemployment Shares for Men and Women by Age - May 1992
Poland

age brackets (years)	Men			Women		
	part.rate	unempl.rate	LTU share	part.rate	unempl.rate	LTU share
< 25	0.469	0.231	0.197	0.377	0.300	0.166
25 - 34	0.946	0.122	0.275	0.733	0.169	0.259
35 - 44	0.935	0.107	0.251	0.854	0.109	0.318
45 - 54	0.815	0.075	0.326	0.737	0.081	0.275
55 - 64 (men) 55 - 59 (women)	0.505	0.072	0.163	0.376	0.045	0.538
≥ 65 (men) ≥ 60 (women)	0.211	0.040	0.300	0.156	0.026	0.364

Participation Rates, Unemployment Rates, Long-term Unemployment Shares for Men and Women by Age - May 1993
Poland

age brackets (years)	Men			Women		
	part.rate	unempl.rate	LTU share	part.rate	unempl.rate	LTU share
< 25	0.522	0.227	0.346	0.410	0.280	0.416
25 - 34	0.937	0.101	0.494	0.771	0.159	0.505
35 - 44	0.917	0.097	0.379	0.854	0.107	0.507
45 - 54	0.790	0.076	0.402	0.699	0.096	0.476
55 - 64 (men) 55 - 59 (women)	0.459	0.052	0.375	0.375	0.093	0.259
≥ 65 (men) ≥ 60 (women)	0.216	0.047	0.333	0.167	0.042	0.526

Source: own calculations

Table 7

Labour Market Transition Probabilities from Unemployment for Men by Duration
May 1992 to May 1993
Poland

Months	Origin Stock	UE	UU	UN
$0 \leq x \leq 3$	157	0.465	0.401	0.134
$3 < x \leq 6$	154	0.416	0.461	0.123
$6 < x \leq 9$	95	0.432	0.453	0.116
$9 < x \leq 12$	175	0.377	0.491	0.131
$x > 12$	190	0.416	0.426	0.158

Labour Market Transition Probabilities from Unemployment for Women by Duration
May 1992 to May 1993
Poland

Months	Origin Stock	UE	UU	UN
$0 \leq x \leq 3$	145	0.248	0.593	0.159
$3 < x \leq 6$	139	0.245	0.518	0.237
$6 < x \leq 9$	101	0.386	0.396	0.218
$9 < x \leq 12$	177	0.379	0.441	0.181
$x > 12$	197	0.299	0.548	0.152

Source: own calculations

Table 8

Labour Market Transition Probabilities for Men by Educational Category
May 1992 to May 1993
Poland

	Origin Stock	E	U	N
University				
E	548	0.958	0.015	0.027
U	30	0.467	0.233	0.300
N	138	0.167	0.014	0.819
Postsecondary				
E	82	0.902	0.024	0.073
U	7	0.571	0.143	0.286
N	18	0.278	0.056	0.667
Sec.vocational				
E	1123	0.928	0.043	0.029
U	116	0.509	0.345	0.147
N	319	0.163	0.041	0.796
Sec.general				
E	216	0.889	0.014	0.097
U	23	0.217	0.435	0.348
N	162	0.123	0.056	0.821
Vocational				
E	2323	0.911	0.052	0.037
U	366	0.451	0.467	0.082
N	601	0.153	0.123	0.724
Elementary				
E	1553	0.825	0.046	0.129
U	219	0.338	0.511	0.151
N	1540	0.078	0.014	0.908
Incompl.Schooling				
E	135	0.711	0.007	0.281
U	10	0.200	0.300	0.500
N	289	0.055	0.003	0.941

Source: own calculations

Table 9

Labour Market Transition Probabilities for Women by Educational Category
May 1992 to May 1993
Poland

	Origin Stock	E	U	N
University				
E	477	0.950	0.004	0.046
U	27	0.444	0.370	0.185
N	138	0.239	0.051	0.710
Postsecondary				
E	323	0.941	0.034	0.025
U	25	0.360	0.320	0.320
N	95	0.358	0.105	0.537
Sec.vocational				
E	1094	0.899	0.045	0.056
U	163	0.337	0.534	0.129
N	551	0.187	0.091	0.722
Sec.general				
E	507	0.897	0.024	0.079
U	94	0.394	0.362	0.245
N	461	0.085	0.041	0.874
Vocational				
E	1101	0.866	0.064	0.071
U	244	0.320	0.553	0.127
N	668	0.154	0.135	0.711
Elementary				
E	1427	0.839	0.025	0.137
U	198	0.212	0.545	0.242
N	2566	0.050	0.021	0.929
Incompl.Schooling				
E	171	0.749	0.006	0.246
U	8	0.250	0.250	0.500
N	672	0.024	0.003	0.973

Source: own calculations

Table 10

Participation Rates, Unemployment Rates, Long-term Unemployment Shares for Men by Educational Category
Poland

Educational category	May 1992			May 1993		
	part.rate	unempl.rate	LTU share	part.rate	unempl.rate	LTU share
University	0.808	0.054	0.290	0.809	0.029	0.412
Postsecondary	0.832	0.079	0.429	0.813	0.046	0.500
Sec.vocational	0.795	0.094	0.308	0.804	0.080	0.347
Sec.general	0.596	0.096	0.174	0.596	0.092	0.409
Vocational	0.817	0.137	0.216	0.833	0.133	0.397
Elementary	0.535	0.124	0.251	0.506	0.122	0.415
Incomplete schooling	0.334	0.069	0.500	0.274	0.042	0.600

Participation Rates, Unemployment Rates, Long-term Unemployment Shares for Women by Educational Category
Poland

Educational category	May 1992			May 1993		
	part.rate	unempl.rate	LTU share	part.rate	unempl.rate	LTU share
University	0.785	0.055	0.179	0.805	0.037	0.474
Postsecondary	0.785	0.071	0.200	0.849	0.077	0.345
Sec.vocational	0.695	0.132	0.289	0.734	0.140	0.441
Sec.general	0.566	0.075	0.556	0.562	0.112	0.522
Vocational	0.668	0.182	0.261	0.709	0.207	0.453
Elementary	0.388	0.123	0.240	0.373	0.126	0.520
Incomplete schooling	0.210	0.052	0.324	0.178	0.033	0.600

Source: own calculations

Table 11

Estimate of Augmented Matching Function in Poland
Males and Females
Pooled Cross Section Time Series Quarterly Data: I.1993 - II.1994

Dependent variable is ln of hirings	
Regressor	Coefficient
Constant	-1.7865** (.39693)
ln of Vacancies	0.07204** (.01837)
ln of Short-term Unemployment	0.75627** (.07655)
ln of Long-term Unemployment	0.16356** (.06175)
Training	-0.00142 (.00372)

Standard errors in parentheses.

Diagnostics: $Rbar^2$: .82 ; S.E. of Regression: .221.

*(**) significant at the 5%(1%) level of significance.

Note: Higher-order term, regional and time dummies were included in the regression, but are not shown.
No. of observations: 294.

Table 12

Czech Republic Basic Indicators

	1989	1990	1991	1992	1993	1994
GDP (billion koruny/constant prices)	505.7	503.7	432.1	403.6	402.3	
GDP (1989 = 100)	100	99.6	82.0	79.8	79.5	
Industrial output	100	96.5	73.0	63.0	58.3	
In thousands						
Population (end-year)	10300	10300	10300	10300	10300	10300
Labor force (end-year)		5626	5369	5184	5292	5121
Employment (end-year)		5586	5147	5049	5107	4957
Unemployment (end-year)						
Persons		39379	221749	134788	185216	163877
Unemployment rate		0.7	4.1	2.6	3.5	3.2
Fiscal balance (% of GDP)	-2.4	0.1	-2.0	-0.5	1.4	
Net domestic publ. Debt (% of GDP)			5.0	7.0	7.0	
Net external debt (% of GDP)				17.6	17.8	
Net external debt (billion US$)		3.5	5	4	2.7	
Net debt-export ratio (%)		50	61	36	19	
Current account (million US$)		-337.8	1142.7	52.9	580.0	
FDI (million US$)		120.4	510.7	982.9	516.6	
Portfolio investment (million US$)		0	-35.8	1062.3		
Rate of inflation (annual average) %			56.7	11.1	20.8	10.0
Average wage inflation in industry %			16.7	22.2	23.8	

Source: EBRD, Econ. Com. for Europe (1994), own calculations.

Table 13

Stock of private firms with 0-5 dependent employees and unemployment rate in Czech Republic by region - April 1994

Region	Frequency	Percent	Freq./reg. LF	u-rate(%)**
Other	378614	51.55	0.13	4.6
"Austria"	45963	6.26	0.13	4.4
"EX-GDR"	63098	8.59	0.13	4.3
"Bavaria"	24132	3.29	0.13	2.2
Prague	144200	19.63	0.19	0.4
BPO*	78416	10.68	0.13	3.3
Total	734423	100.00	0.14	3.7

*BPO = Brno, Plzen and Ostrava. **September 1994
Source: Own calculations.

"Austria" = regions in CR bordering at Austria;
"Ex-GDR" = regions in CR bordering at Ex-GDR;
"Bavaria" = regions in CR bordering at Bavaria.

Table 14

Czech Legal Workers in West Germany* and in the Bavarian Border Regions

	1990	1991	1992	1993
Czech workers in West Germany	13394	20927	32258	34064
Index base 1990	100	156	241	254
As % of the total LF	0.06	0.09	0.14	0.15
As % of all foreigners	0.75	1.10	1.58	1.56
Czech in Bavarian border regions	502	5871	13172	12980
Index base 1990	100	1170	2624	2586
As % of the total LF	0.1	0.9	2.1	2.1
As % of all foreigners	2.8	22.8	37.8	35.1
% of all Czechs in WG	3.7	28.1	40.8	38.1
Memorandum values				
West German LF	22368078	23173439	23530259	23122456
Index base 1990 total	100	104	105	103
of which				
Index base 1990 Germans	92	95	96	93
Index base 1990 foreigners	8	9	9	10
Share of foreigners in the LF in WG	8.0	8.2	8.7	9.4
BBR LF	596165	628424	638665	629660
Index base 1990 total	100	105	107	106
of which				
Index base 1990 Germans	97	101	101	100
Index base 1990 foreigners	3	4	6	6
Share of foreigners in the LF in BBR	3.0	4.1	5.5	5.9
Czechs in "Werksvertrag" in WG		6348**	11646**	595**
BBR LF as Share of WG LF (%)	2.7	2.7	2.7	2.7

**Note*: Employment statistics are only available for the old Federal Republic.

***Note*: Stocks for Werksvertrag-employees are end-of-year. All other stocks are mid-year.

Source: Beschäftigtenstatistik der Bundesanstalt für Arbeit, Nuremberg.

Annex 1

Czech ALMPs

a. Socially Purposeful Jobs (SPJ)

The SPJ scheme consists of two different types of programmes: assistance to new entrepreneurs and the creation of jobs with already existing enterprises (both private and state sector). In both cases, assistance is only given to unemployed people. All proposals for SPJ must be for newly created jobs that have a reasonable chance to be viable in the long run. Czech law states that a SPJ should last for at least two years. There is a penalty for not maintaining a SPJ for that period, but it is not clear how well this monitored. The programme is administered through the district employment offices. The offices are responsible for distributing, funding and monitoring these jobs. Funding is provided in the following three ways:

-subsidy
interest free loan and/or
payment of interest on loans taken by employer

A combination of these payments is also possible, but the maximum reimbursement per job is 12 times the average monthly rate of unemployment benefit in the district. Although the offices' contribution to the cost of creating a new job is considered marginal , it still acts as an incentive, especially for people starting new businesses who lack capital.

b. Publicly Useful Jobs (PUJs)

PUJs offer temporary employment for unemployed people for a period of up to six months in order to provide work experience to the unemployed. PUJs are essentially public works jobs that are considered beneficial to the local community. The district employment office is in charge of the administration of the PUJs. These jobs are mostly supplied by local authorities and require unskilled or semi-skilled individuals. A large portion of these jobs is of the menial type (e.g. street cleaning). Benefit can be withdrawn for refusing a PUJ, as long as the work refused is of a suitable professional level and appropriate to the general circumstances of the individual benefit recipient.

PUJs are especially used for difficult groups and workers to whom an offer on the scheme counts as an offer of suitable work. Many employment offices use PUJ as an instrument to test willingness to work. PUJs are generally seen as short-term and a very small percentage of workers on this scheme stay with their employers after completion of the PUJ.

c. Practice for School Leavers

Under this scheme the district employment offices pay subsidies to employers who provide working positions for school leavers and graduates. In addition there may be a modest tax relief for these employers. The aim is to help young labour market entrants to get their first job in order to acquire practical experience. Jobs provided should be newly created working positions. The work contract between employer and school leaver or graduate is to be of unlimited duration.

The programme generally lasts one year during which the employed has to spend at least six months of specialist practice corresponding to the individual's qualifications.

d. Re-training

Retraining necessary for getting a job is an aspect of the right to employment created by the Employment Act. However, individuals have no specific entitlement to retraining. District employment offices are responsible for arranging retraining for registered unemployed people where it is an essential prerequisite for their finding a job. District employment offices must take into account the current need for specific professions in the labour market as well as the structure of the newly emerging vacancies. Duration and achievement of a retraining programme are not defined by law. There are two types of retraining courses: training in job-specific skills and training in general skills not linked to a particular kind of job. Under certain circumstances retraining of employees is undertaken to avoid redundancies.

Hungarian ALMPs discussed in the main text[44]

The Hungarian authorities apply a full menu of ALMPs in order to combat unemployment. Here are discussed only the two largest schemes (in terms of participants) which also have been evaluated using micro data.

[44]Sources used are O'Leary (1994) and Szemlér (1994).

a. Further Training and Re-training

Unemployed persons interested in further training and retraining are normally informed about the availability of such courses at the local employment centre. Anyone who is unemployed can apply for retraining. In fact, according to the law, the unemployed may be obliged to enter retraining, but this is not in general applied in practice. As mentioned in the main text, strong "creaming off effects" seem to be at work as counsellors try to place those with the highest aptitude into these training courses. Instead of unemployment compensation participants receive a slightly higher training subsidy from their local employment centre.

b. Public Service Employment (PSE)

This measure is comparable to the British Community Programme or the German *Arbeitsbeschaffungsmaßnahmen (ABM)* programme. Local employment centres finance work places, established by firms or administrative organs at the local level, which are engaged in production of goods useful to the community. The unemployed is obliged to take the offered place as long as it is commensurate with his/her educational and professional background which implies, given that in most cases the nature of the performed jobs is of a low level, a selection of participants with characteristics less favourable than those of the average unemployed. To avoid displacement of output effects the stipulation applies that only goods should be produced which without subsidy will not be produced by the private sector. As there are not many private firms which are yet able to fulfil the legal requirements the large majority of these work places is created by local government. As mentioned in the main text, substitution and fiscal substitution effects seem to be present with the application of this scheme.

Polish ALMPs[45]

a. Public Works

Local authorities employ those with uninterrupted unemployment spells of more than 6 months on public projects. Most projects are intended to expand or maintain the public infrastructure. Some workers find employment on projects of environmental protection or amelioration. The duration of these jobs cannot exceed six months and it is the expressed intention of the government to rotate among the long-term

[45]Sources: Lehmann (1993b) and Polish Ministry of Labour and Social Policy (1994).

unemployed. It is important to note that the nature of Public Works is different from that of pre-World-War-Two Public Works which were organised in a quasi-military fashion. Today's Public Works are strongly decentralised and local authorities are encouraged to suggest worthwhile projects. There are no nation-wide data on average remuneration, but there is some casual evidence from Ministry of Labour officials that people employed on Public Works might receive wages that are above the minimum wage.

b. Intervention Works (Wage Subsidies)

This term is somewhat misleading. Firms (private or state-owned) can approach the local employment council (Polish: Rada Zatrudnienia) and ask for subsidised additional work places. In order to qualify for this scheme the firm has to have more than 10 employees and must not have released more than 10% of its workforce in the last six months. Again, subsidised employment is not to exceed six months. The state pays a wage subsidy to the firm equal to the level of benefits and often firms or local employment councils pay additional wages to these workers.

c. Further Training and Re-training

Private and public agencies are paid a fee to train some of the unemployed who in turn are paid an allowance (115% of benefits) while on the course. Many of these courses have a short duration[46] and casual evidence tells us that the human capital enhancing content of the majority of such courses might be dubious.

d. Start-up loans

This scheme is comparable to the British Enterprise Allowance Scheme where unemployed are subsidised by employment offices to start-up their own businesses. In the Polish case, credits are granted to unemployed people which cannot exceed 20 times the average remuneration. While these grants are also given to engage in economic activity in the agricultural sector, the use of these funds for the purchase of land is precluded. If after 24 months of founding a business it is still operative, 50% of the loan will be written off. Employment offices seem to vet applicants well as many of the started businesses presumably survive for more than two years.

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[46]Steady state calculations using administrative data show that in 1992 the average duration of a training course was for women 1.58 and for men 1.75 months (Lehmann,1993b). The micro data of the Labour Market Policy Supplement, discussed in the main text, spoke of a mean duration of 10.5 weeks. The law, on the other hand, stipulates that training courses for the unemployed should under normal circumstances not exceed 6 months, they can in principal last 12 months, though.

Most of the started businesses are in the services sector which is underdeveloped in Poland. Displacement of output effects which, in the case of the British Enterprise Allowance Scheme, are estimated to be approximately 50% (cf. Stern, 1988) should, therefore, be negligible.

Annex 2

Employment, labour productivity and investment in eastern Germany

Productivity in eastern Germany has increased since 1991 but was still lower as in western Germany in 1992.[47] This is due to higher production and lower employment. This trend continued also in 1993 as can be seen in tables A1, A2 and A3.

For mining and the manufacturing industry there exists some more detailed information for the single *Länder*. As net production is not available we take sales and employment data to compute our productivity measure.

For most of the *Länder* sales from 1991 to 1992 were decreasing, but increasing from 1992 to 1993. Employment shrank in all *Länder* for the whole period. The data in table A4 show that productivity increased from 1991 to 1992 much more than from 1992 to 1993. This is confirmed by more aggregated results with net production in the manufacturing industry for the whole of eastern Germany[48]. Analysing the productivity developments by sector Burda and Funke found that "structural change will be associated with higher aggregate productivity growth"[49].

Employment:

Although production has increased since the beginning of 1992, the number of employed has declined from 1991 to 1993 steadily. Only trade and transport and the state sector have remained at almost the same levels and the service sector gained 11% from the first quarter of 1992 to the first of 1994. Table 2 contains detailed figures for this last mentioned period. The increase of production was clearly not large enough to compensate the increase in labour productivity.

Looking at branch level in mining and manufacturing employment has declined from 1993 to 1994 in most branches. construction materials , wood-processing , paper and cardboard, printing and plastics had positive growth rates in employment, with plastics up to 31.8%.[50]

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[47]DIW Wochenbericht, Nos 47/92 and 7/93.

[48]Institut für Wirtschaftsforschung Halle, *Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland*, Forschungsreihe 6/94, p. 10.

[49]Burda and Funke, "Eastern Germany: Can't we be more optimistic?" Berlin, mimeo, August 1993, p. 11.

[50]Statistisches Bundesamt, Fachserie 4, 4.1.1., June 1994, p. 176f.

Productivity and investment:

Investment flows in Eastern Germany are very large. Gross asset investment from 1991 to 1993 accounted for ca. 342 Billion DM.[51] Gross investment per person increased very rapidly in eastern Germany and exceeded the level of western Germany in 1993. It is noteworthy that investment is more and more done by private companies while the investment undertaken by the state is decreasing.[52]

Comparing the results of productivity development with the intensity of investment in 1991 and 1992 one can see the positive correlation of productivity and investment. The higher the investment intensity the higher the productivity. Also the increase of productivity is positively correlated with the increase in investment 1991 to 1992 (table 5).

It should be clear though that productivity does not only depend on investment. The increase in productivity can be got by exits of formerly state owned enterprises, as well as the restructuring of existing companies and entry of new enterprises. While the second and third in general need capital investment, the first leads to higher productivity without it. There are no data on the number of exists and entries of enterprises to see how important new enterprises are, but aggregate data for mining and manufacturing show that the number of companies decreased except in Sachsen - Anhalt from 1991 to 1992. For 1992 to 1993 there is no homogeneous trend any longer, in some of the *Länder* the number of companies is increasing again.[53]

Whether investment into new enterprises or into existing ones is more important for eastern Germany is not clear. Certainly in some branches new enterprises play definitely an important role.[54] Green field investments are important too,[55] because of their modern equipment they imply productivity levels comparable to or exceeding western German levels. The numbers about green field investments do not say

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[51]Statistisches Bundesamt, *Zur wirtschaftlichen und sozialen Lage in den neuen Bundesländern*, March 1994, p. 42.

[52]Institut für Wirtschaftsforschung Halle, *Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland*, Forschungsreihe 6/94, p. 44

[53]Statistische Bundesamt: Fachreihe 4, 4.1.1. December 1991, p. 135; Dec.1992, p. 148; Dec. 1993, p. 178.

[54]Jäckel, P, "Neue Bundesländer: Weiterer Anstieg der Industrieinvestitionen", ifo-Schnelldienst No. 24/1994, p. 12.

[55]Jäckel, P, "Neue Bundesländer: Weiterer Anstieg der Industrieinvestitionen", op. cit., p.11.

anything about the number of newly founded enterprises, though, as this type of investment can be realised in already existing companies as well as in new ones.

Germany has thus far pursued a high-wage-high-technology-strategy expressing itself in very high investment intensity rates. Such a strategy has produced rapid productivity gains but also employment losses which in the short- and medium-run cannot be made up by an even very large positive supply response.

Table A1: Gross value added in Eastern Germany, 1992-1994, in Bill.DM, prices of 1991

	1992 I	II	III	IV	1993 I	II	III	IV	1994 I
Agricult., forestry	-0.6	-0.5	3.5	0.5	-0.3	-0.3	3.9	0.8	-0.1
Production:	18.2	19.6	20.2	21.1	19.0	22.1	23.0	23.9	22.4
Mining and Energy	*3.6*	*3.0*	*3.2*	*3.5*	*3.3*	*3.1*	*2.8*	*3.4*	*3.2*
Manufacturing	*8.3*	*9.1*	*9.2*	*10.4*	*8.5*	*9.9*	*10.7*	*11.9*	*10.3*
Construction	*6.3*	*7.6*	*7.9*	*7.2*	*7.1*	*9.2*	*9.5*	*8.6*	*8.9*
Trade and Transport	6.6	7.1	7.0	7.7	7.2	7.7	7.6	8.2	7.7
Service	12.6	13.5	13.9	13.6	13.0	13.9	14.2	14.0	13.3
Others	11.4	11.6	11.6	11.7	11.6	11.7	11.7	11.6	11.6
Gross Value Added (not adjusted)	**48.2**	**51.3**	**56.2**	**54.6**	**50.5**	**55.1**	**60.4**	**58.5**	**54.9**

Source: Institut für Wirtschaftsforschung Halle, *Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland*, Forschungsreihe 6/94, p. 7.

Table A2: Employment in Eastern Germany, 1992-1994, (thousands)

	1992 I	II	III	IV	1993 I	II	III	IV	1994 I
Agricult., forestry	313	290	272	251	235	229	218	218	209
Production	2368	2322	2308	2288	2152	2141	2143	2101	2046
Trade and transport	1177	1162	1156	1158	1155	1154	1169	1189	1105
Services	978	992	994	996	1009	1036	1046	1065	1088
State	1596	1588	1584	1583	1585	1575	1548	1543	1544
Total	6432	6354	6314	6276	6137	6135	6124	6116	6092

Source: Institut für Wirtschaftsforschung Halle, *Gesamtwirtschaftliche und unternehmerische Anpassungsfortschritte in Ostdeutschland*, Forschungsreihe 6/94, p. 8.

Table A3: Labour productivity* in Eastern Germany:

Year	Produvctivity Western Germany = 100	Average monthly grosswage and -salary for dependent employed Western Germany = 100
1991	27.8	49.1
1992	38.8	62.8
1993	46.1	68.2

* Nominal gross national product per employed person

Source: Statistisches Bundesamt: *Zur wirtschaftlichen und sozialen Lage in den neuen Bundesländern*, März 1994, p. 29 and *Volkswirtschaftliche Gesamtrechnungen*, Fachserie 18, Reihe 3, 2. Vierteljahr 1994, pp. 53-55.

Table A4: Investment Intensity* 1991-1992 and Productivity* 1991 - 93 in Eastern Germany, (thousand DM per employed and %)

	Investment intensity**			Productivity				
	1991	1992	Change 1991-92	1991	1992	1993	Change 1991-92	1992-93
Berlin-Ost	***	***	***	54.6	93.6	123.3	71.4	31.7
Brandenburg	8.7	14.5	66.7	70.9	96.9	135.5	36.6	39.9
Mecklenburg-Vorpommern	6.7	19.2	186.6	64.7	120.8	164.2	86.6	35.9
Sachsen	5.9	14	137.3	48	89.5	125.1	86.3	39.8
Sachsen-Anhalt	7.9	15.5	96.2	65.5	113.6	142.7	73.5	25.6
Thüringen	5	18.6	272	40	84	127.2	110.3	51.3

* For mining and manufactoring industry, respective prices, enterprises with 20 employees and more.
** No data for 1993.
*** No data.
Source: Statistisches Bundesamt, Fachserie 4, 4.1.1; Statistisches Bundesamt: *Zur wirtschaftlichen und sozialen Lage in den neuen Bundesländern*, März 1994, p. 45; own calculations.

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